

MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS



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in this issue... Industrial Relations in 1938 • Wages and Hours
in 1938 • Living Costs in 1938 • Industrial
Injuries in the United States

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MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

+ HUGH S. HANNA, EDITOR +

CONTENTS

MARCH 1939 Vol. 48 No. 3

Cover: Pay Day at Grand Coulee Dam.

Special articles:

	Page
Industrial relations in 1938.....	493
Wages and hours in 1938.....	509
Living costs in 1938.....	531

Social security:

Recent changes in dismissal-compensation plans.....	538
Work of Social Security Board, 1937-38.....	544
Grants for old-age assistance.....	545
Pensions for the blind in Canada.....	548

Industrial and labor conditions:

Working conditions of pecan shellers in San Antonio.....	549
Working conditions under the TVA.....	551

Employment conditions:

Unemployment in Canada, 1921 to 1938.....	554
Measures relating to depressed areas in Great Britain.....	555

Labor involved in industrial production:

Labor requirements in manufacture and distribution of electrical products.....	559
--	-----

Productivity of labor and industry:

Productivity and employment in the beet-sugar industry.....	564
Labor efficiency in the Soviet Union.....	567

Unemployed youth:

Economic condition of rural youth.....	570
--	-----

Negro in industry:

Conference on problems of the Negro and Negro youth.....	576
--	-----

Education and training:

National Occupational Information and Guidance Service.....	578
NYA student aid, 1938-39.....	579

Housing conditions:

Characteristics of urban housing, 1933 to 1936.....	580
International comparison of rents.....	582

Cooperation:

Position of cooperatives under Wage and Hour Act.....	586
The cooperatives and TVA.....	587

Profit sharing:

Compulsory profit sharing in Venezuela.....	589
---	-----

Health and industrial hygiene:

Medical care for low-income farm families.....	592
Congress on industrial health.....	595

Industrial accidents:	Page
Industrial injuries in the United States during 1937.....	597
Industrial injuries to women and men, 1932 to 1934.....	615
Labor laws and court decisions:	
Recent court decisions of interest to labor:	
Constitutionality of State law regulating hours of truck drivers.....	619
Right of illegally employed minor to recover for injuries.....	620
Meaning of "voluntarily leaving," as used in unemployment compensation act.....	621
Relief appropriation of 1939.....	622
Prohibition of discharge in Argentina because of marriage.....	623
Industrial disputes:	
Trend of strikes.....	624
Analysis of strikes in November 1938.....	625
Activities of the United States Conciliation Service, January 1939.....	633
National income:	
National income, 1929 to 1937.....	635
Cost and standards of living:	
Changes in cost of living in the United States, December 15, 1938.....	639
Cost of living in foreign countries.....	651
Where the purchaser's food dollar goes.....	655
Minimum wages and maximum hours:	
Operation of wage and hour law, 1938.....	657
Steel wage determination under Public Contracts Act.....	659
Bobbinet wage determination under Public Contracts Act.....	661
Application of hours decrees in France.....	662
Regulation of hours of young persons in Great Britain.....	664
Wages and hours of labor:	
Wages and hours in the fertilizer industry, 1938.....	666
Union scales of wages and hours of motortruck drivers, June 1, 1938.....	682
Puerto Rico—Earnings in various industries, 1937-38.....	692
Yugoslavia—Wages in December 1935 and 1937.....	694
Labor turn-over:	
Labor turn-over in manufacturing establishments, December 1938.....	697
Employment offices:	
Operations of United States Employment Service, January 1939.....	701
Building operations:	
Summary of building construction in principal cities, January 1939.....	707
Trend of employment and pay rolls:	
Summary of reports for January 1939:	
Total nonagricultural employment.....	712
Industrial and business employment.....	712
Public employment.....	715
Detailed reports for industrial and business employment, December 1938.....	718
Retail prices:	
Retail prices of food in January 1939.....	741
Wholesale prices:	
Wholesale prices in January 1939.....	748
Recent publications of labor interest.....	753

This Issue in Brief

Wages and hours in 1938.

During the recession of the early part of 1938, hourly earnings fell but slightly from the comparatively high levels of 1937. Weekly hours and weekly earnings fluctuated more widely, mainly because of changes in business conditions. Late in the year, hourly earnings as well as weekly earnings and weekly hours tended to rise. Notable developments of the year included the growth of collective bargaining, the extension of public policies both Federal and State, and increased interest in the problems of wages and living standards. These are some of the features of a general summary of wages and hours in 1938, with analysis of the factors involved. Page 509.

Industrial relations in 1938.

Although business conditions in 1938 were not conducive to any great extension of union membership, organized labor was able not only to maintain its relatively high 1937 membership figure but to make increases in certain trades and areas. A number of agreements were signed in industries and professions where collective agreements had not been general. In industries previously organized, unions in most cases were able to maintain and renew their contracts without wage reductions. During the year, too, an increasing number of employers began to accept trade-unions and to adjust their management methods and policies accordingly. Organized labor was not able, however, to make much headway where resistance had proven most difficult in 1937, such as in a few of the medium-size and smaller steel companies, west coast and southern agriculture, and some southern sec-

tions of the lumber, tobacco, textile, and other industries. Page 493.

Cost of living in 1938.

The cost of goods purchased by wage earners and lower-salaried workers was 1.6 percent lower in 1938 than in 1937, food prices being the most important factor in the change. As there were also declines in employment and in average weekly earnings, the gross purchasing power of these workers was considerably reduced. In manufacturing industries this reduction in aggregate purchasing power was approximately 23 percent. Page 531.

Industrial injuries in the United States during 1937.

Estimates indicate that during 1937 there were 19,600 occupational deaths, 127,000 permanent injuries, and slightly less than 1,700,000 temporary injuries in the United States. These estimates include not only workers, but also self-employed proprietors. For employed workers only, the fatalities arising in the course of employment were estimated as 17,800, the permanent injuries as nearly 112,000, and the temporary disabilities at 1,533,600. The total of all disabling occupational injuries amounted to about 1,838,000. Mining and quarrying rated as the most hazardous from the point of injuries to workers, and construction second. Page 597.

Wages in fertilizer industry.

Hourly earnings in the fertilizer industry averaged 32.6 cents during the spring season of 1938, but the range between plants was from a low of less than 7½ cents to a high of \$1.00. The weekly hours averaged 45. Of the total number of employees

covered in the Bureau of Labor Statistics' survey, 26.1 percent received less than the 25 cents per hour minimum set by the Fair Labor Standards Act for the first year of its operation, beginning in October 1938. Page 666.

Wages of motortruck drivers.

Motortruck drivers' wage rates increased on the average about 3.6 percent during the year ending June 1, 1938. At this date the average hourly rate for drivers was 79.3 cents and for helpers 67.5 cents. The average hours per week provided in union agreements were 47.8. About 60 percent of the drivers worked on a 48-hour basis and about 13 percent were included in agreements which provided hours from 44 to less than 48. Page 682.

Dismissal compensation plans.

Prior to the enactment of the various State unemployment laws, during the past few years, a considerable number of industrial companies had established dismissal compensation plans, under which employees on termination of employment were granted cash payments varying in size usually with years of service. A survey recently completed indicated that while certain of these plans have been modified or discontinued since unemployment insurance laws were enacted, the majority of the companies having such plans have continued them as a supplementary protection to dismissed employees. Page 538.

Grants for old-age assistance.

The Social Security Act provides that the Federal Government may bear half of the expense of old-age assistance granted in the various States, but its share may not exceed \$15 per person per month. Any amount above \$30 per month must be borne by the State or local authorities. How far the actual allowances fall below the \$30 level is indicated by an analysis made by the Social Security Board of nearly 600,000 cases granted assistance during 1937-38. For the whole country the median monthly allowance was \$18. In individual States the median ranged from \$5 to \$38. Nearly 57 percent of all the pensions granted in the period studied were under \$20 per month; 29 percent were between \$20 and \$30; and slightly over 14 percent were over \$30. Page 545.

Labor requirements in making of electrical products.

A study of the labor requirements in the manufacture and distribution of electrical products showed that in 1937, 651 man-hours of labor were required to produce and distribute \$1,000 worth of electrical products. The production of the raw materials used accounted for 37 percent of this labor; the transportation of the materials to the factories, for 2 percent; manufacturing, for 48 percent; engineering and development, for 5 percent; administration and sales, for 7 percent; and transportation of the finished product to the construction site, for 1 percent. Man-hour data were obtained for 13 major groups of products and 26 selected items. Page 559.

MONTHLY LABOR REVIEW

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INDUSTRIAL RELATIONS IN 1938

By FLORENCE PETERSON, *Bureau of Labor Statistics*

THE YEAR 1937 had witnessed an unprecedented growth in trade-union membership and activity. The reverberations of organizing campaigns were heard throughout industry and even in certain portions of agriculture. The general public was made conscious, as perhaps never before, of the dissatisfaction among the wage earners of the country. Labor leaders were headlined in the papers and union affairs and activities competed with other news events in the general press.

This extensive union activity of 1937 was a continuation of the accelerated growth in union organization which began with the passage of the National Industrial Recovery Act in 1933. It received added impetus when the Supreme Court upheld the validity of the National Labor Relations Act in April 1937. An important factor, however, was the favorable business situation. During most of the year production was rising and business was making a profit. Wage earners found the situation favorable for pressing demands for a share in the gains of this business prosperity, as well as a readjustment in the management-worker relationship.

The year 1938 opened with business conditions greatly changed. During the winter months factory employment dropped more than 30 percent and was to decline still further. With this decline in business came demands from many employers for decreases in wage rates. It was apparent that 1938 would prove to be a severe test of the ability of trade-unions to hold on, faced as they were with severe unemployment among their newly organized members, as well as the pressure for withdrawing the wage gains they had obtained in 1937.

The way in which organized labor met its internal and external problems in 1938 was probably even more significant than its success under the relatively favorable conditions of 1937. Reduced funds made it necessary to lay off many of its organizers, but organization work continued, although at a slower pace. While few wage increases were demanded, there was a vigorous effort not to allow any serious disruption in wage scales. Some wage cuts occurred, especially in the smaller plants. In the mass-production industries and on the rail-

roads, wage scales were maintained almost without exception through peaceful negotiations.

As business gradually improved during the latter half of the year, the unions immediately undertook to tighten up their local organizations. They tried to guard against discrimination by seeing that rehiring was done on the basis of seniority. After their members were reemployed, they carried on intensive campaigns to induce former members to resume payment of union dues. At the close of the year it was evident that organized labor not only had held its own by maintaining most of the local unions and by renewing agreements as they expired, with no reductions in wage rates, but also had made some extensions into new trades and industries and localities.

During the year, too, there was a perceptible change in the attitude of many employers toward the collective-bargaining situation within their plants. An increasing number began to accept the trade-union as an integral part of their management program, and to adjust their methods and policies accordingly. Organized labor had not been able, however, to make much headway where resistance had proven most difficult in 1937, such as in a few of the smaller and medium-size steel companies, west coast and southern agriculture, and some southern sections of the lumber, tobacco, textile, and other industries.

Labor Disputes

In 1937 an unprecedented number of strikes had taken place. Strikes were called as a means of rallying workers into the union; in other instances strikes were resorted to when employers refused union recognition after the union had obtained a majority representation. Most of these strikes took the conventional form of a walk-out with picketing. A considerable number, however, were sit-down or stay-in strikes, and these had received a great deal of publicity and acrimonious discussion both by the parties concerned and the general public.

The strike picture was greatly changed in 1938. There were only half as many strikes as in 1937, with only about one-third as many workers involved. The proportion of union organization and recognition strikes declined somewhat, whereas the number of strikes in protest against wage cuts increased. Also, there were more strikes over questions of seniority and lay-off policies. The latter disputes were frequently the result of too casual or ambiguous seniority clauses in the agreements. When the lay-off test came, managers and workers differed as to interpretation.

The number of sit-down strikes greatly decreased during 1938. Although unfavorable public opinion was an important factor in causing this decrease, most of the union officials themselves discouraged such spontaneous action. After the first upheaval in getting the unions recognized, most of the unions considered sit-down strikes to

be inadvisable and unnecessary. While this was true generally, sit-down strikes continued to occur in a few localities and industries.

Certain sections of automobile manufacturing were much harassed by labor strife and confusion during 1938. The initial organization drives, accompanied by numerous strikes, had taken place in 1937. These had resulted in union agreements with all the major firms except the Ford Motor Co. The signing of these agreements, however, did not establish peace. Although the reluctant way in which some of the companies accepted the collective-bargaining relationship was no doubt responsible for some of the continued strain, the situation within the union itself was not favorable to the building up of stable employer-union relationships. For a number of months there had been growing suspicion and ill feeling among officers of the union. During the summer of 1938, C. I. O. officials had attempted through compromise measures to bring about unity. The internecine struggle continued, however, and by the close of the year there was every indication of a real split.

West coast.—Probably the most severe crisis which organized labor faced during 1938 was on the west coast. During 1937 and the early months of 1938 there had been increasing tension between the various groups of employers and unions, as well as between various unions. Associations of agricultural and industrial employers were organized in order to aid their members in time of strike and to combat the increasing unionization in their communities. The situation was intensified by the numerous disputes between rival unions and leaders, particularly those in the Washington and Oregon lumber industry, and among warehouse and maritime workers all along the coast.

Antiunion employers, as well as others who did not oppose the principle of collective bargaining but who became impatient and alarmed over the rival-union disputes, united on a legislative program to curtail the activities of organized labor. In September, Los Angeles passed an ordinance severely limiting the right to strike and picket. State initiative proposals appeared on the ballots in California, Washington, and Oregon which would not only restrict strike and picketing activity but forbid the use of coercion and intimidation in any labor dispute and make sit-down strikes illegal.

A preliminary test was provided in the several strikes and lock-outs which occurred shortly before the State elections, chiefly that of the warehousemen (C. I. O.) and retail clerks (A. F. of L.) in San Francisco. In both instances union agreements had expired and employers had refused to negotiate for new agreements until the unions made certain concessions. The unions interpreted this attitude as an unwillingness to bargain and an intention to get an open-shop campaign under way before the November elections. All realized that the outcome of these strikes would have a major influence on whether or not

the longshoremen's agreement, expiring September 30, would be peacefully renewed. If not, a conflict even more serious than that in 1934 was predicted.¹

Faced with such serious threats from organized employers, rival unions laid aside their factional disputes and united in a common program of defense. Toward the latter part of October, compromise settlements were effected on the particular issues involved in the warehousemen's and retail clerks' disputes. A new agreement between the waterfront employers and the longshoremen was signed without a strike. Organized labor considered the outcome of these disputes as significant victories since, in spite of strong opposition, the unions had been successful in maintaining a collective-bargaining status.

During this time all the unions united in a strenuous campaign of publicity and education on the dangers to labor of the initiative proposals. At the polls a few weeks later the initiative proposals in California and Washington were defeated. In Oregon, however, the measure passed and became effective December 1, 1938.

A. F. of L. vs. C. I. O.—A disturbing factor on the American labor scene is the existence of two rival labor-union movements. This situation was not improved during the year 1938. In December 1937 negotiations between the A. F. of L. and C. I. O. representatives, chosen by their respective organizations to investigate the possibilities of peace, adjourned without coming to any agreement. Shortly thereafter the A. F. of L. executive council expelled all the C. I. O. unions² except the International Ladies' Garment Workers' Union, and both organizations took new steps toward forming competing unions in industries where other unions already existed.

Government officials were not unmindful of the seriousness of the situation. President Roosevelt, in his letters of greeting to both the A. F. of L. and the C. I. O. conventions, urged reconciliation and warned against the effects of continued disunity. In October the Secretary of Labor proposed that a mediation committee of 13 persons be created—5 each from the A. F. of L. and C. I. O., and these 10 to choose 3 others.

Although there was much discussion at the October convention of the A. F. of L. regarding the "dual" movement and some earnest proposals were made to resume unity negotiations, no action was taken except the approval of a resolution to "continue the battle and at the

¹ In 1934 a strike of longshoremen not only tied up shipping for several months but led to a general sympathetic strike which practically closed all business in San Francisco for 2 days.

² These unions had been suspended in September 1936. On February 4, 1933, the United Mine Workers, the Mine, Mill and Smelter Workers, and the Flat Glass Workers were expelled. On May 2 the Amalgamated Clothing Workers, the United Textile Workers, the Oil Field, Gas Well and Refinery Workers, the United Automobile Workers, the United Rubber Workers, and the Amalgamated Association of Iron, Steel and Tin Workers were expelled.

The International Ladies' Garment Workers' Union, while technically not expelled from the A. F. of L. was affiliated with the C. I. O. until November 11, 1938, when it voted to become independent.

same time stand ready to respond to any genuine appeal for peace and any honorable and sincere opportunity to reunite the labor movement."³ A month later, the Committee for Industrial Organization shed its temporary form and organized as the Congress of Industrial Organizations.⁴

However, in a number of localities some definite efforts were being made in 1938 to work together for some common ends. For example, as an aftermath to their joint effort to defeat antiunion legislation, the A. F. of L. and the C. I. O. locals in some cities on the Pacific coast were seeking to form permanent united labor councils. In other cities some of the rival unions were expressing a desire "through cooperation to protect the gains of organized labor."

Governmental Activity

Commission on Industrial Relations.—The large number of strikes which took place in 1937 and the growing seriousness of the rupture within the organized labor movement, were cause for concern to the general public as well as to workers and employers. As is usual in a time of dissatisfaction, eyes were turned to other lands for comparison. Some employers and some of the press held that other democratic countries were not experiencing so much industrial unrest, and alluded to certain legislation in those countries as the basis for their more peaceful condition. In response to this growing concern, President Roosevelt sent a commission to Great Britain and Sweden to make an impartial study of their labor-employer relations. The basic conclusions drawn by the commission from its study were that in both these countries collective bargaining was an accepted fact, that employers and workers were well organized, and that there was a "cooperative spirit coupled with restraint"⁵ shown by both parties.

The implication, by contrast, was that any unusual amount of labor disturbance in this country was due in large part to the fact that unionism was just now trying to get a foothold in a large section of our industrial life and that a certain amount of friction was inevitable until both employers and workers become more accustomed to the habit of collective bargaining.

New legislation.—Two major legislative measures passed by Congress during 1938 materially affect the interests of labor. These were the Fair Labor Standards Act and the amendment to the Merchant Marine Act. Although the primary purposes of these acts were directed toward other ends, both of them refer to collective bargaining

³ American Federation of Labor. Proceedings of 58th Annual Convention, 1938, p. 374.

⁴ The first constitutional convention of the Congress of Industrial Organizations was held at Pittsburgh, November 14-18, 1938.

⁵ U. S. Department of Labor. Report of the Commission on Industrial Relations in Great Britain and Sweden. Washington, 1938.

and methods of employer-employee dealing. Directly and indirectly they will have a vital influence on industrial relations within the areas in which they function.

Fair Labor Standards Act.—The Fair Labor Standards Act is primarily concerned with the determination of minimum wages and maximum hours—matters which are outside the scope of this article. However, certain clauses, as well as the general administrative procedure provided in this act, will influence future employer-employee relationships in a number of ways:

Collective bargaining and collective agreements are mentioned specifically in the act with reference to exceptions to the 40-hour week and with reference to fixing minimum wages above 25 cents an hour. In the former case, overtime without extra compensation is allowed for employees working under collective agreements which provide a maximum total working time of 1,000 hours during any period of 26 consecutive weeks, or on an annual basis which provides for a maximum of 2,000 hours during any period of 52 consecutive weeks. Among the factors to be considered in the fixing of wages above the 25-cent minimum immediately provided in the act, are "the wages established * * * by collective labor agreements negotiated between employers and employees by representatives of their own choosing." Such legal recognition to collective bargaining situations will have a tendency to enhance the prestige and importance of collective agreements, as well as to affect the content of the provisions dealing with these specific matters.

Of even greater influence in industrial relations is the provision for the establishment of tripartite industry committees. The knowledge that representatives of the union serve on a Government board along with employer representatives will no doubt carry weight among the rank and file workers. This should help the unions to maintain the interest of their members as well as to enlist the interest of unorganized workers.

Of equal significance are the possibilities offered in the work of the industry committees. At these committee hearings both employer and worker representatives learn about the general economic situation of the entire industry, its problems and prospects. In the process of arriving at a recommendation for the establishment of higher wages than the initial 25-cent minimum rate, employer and worker representatives are afforded an opportunity to engage in what approximates collective bargaining. Since the employer and worker members on the committee represent the entire industry, these negotiations somewhat resemble collective bargaining on a national scale as far as minimum wages are concerned. Unlike collective bargaining, of course, is the fact that these dealings are carried on under Government auspices and have a limited, specified purpose. Nevertheless, within this

framework many employer and worker representatives will meet during the administration of this act to discuss their industry situation and problems.

What this might portend in employer-employee relations was necessarily conjectural at the close of the year. The act became effective on October 24 and during the ensuing 2 months only a few hearings had been held and only two industry committees (textiles and apparel) had been appointed.

Merchant Marine Act.—The amendment to the Merchant Marine Act was primarily to promote further the merchant marine policy originally provided in the 1936 act. A new "title X" was added, however, which deals with the problems of labor relations in water-borne commerce. Under its provisions a Maritime Labor Board was appointed by the President on July 6, 1938, to serve for 3 years.

The chief duties of the Board are: (1) To encourage all maritime employers and employees to bargain collectively and to make and maintain written agreements; (2) upon request of either party, to act as mediator in any dispute over the interpretation of an agreement or over the terms of a new agreement—if mediation services are unsuccessful, the board is to use its best efforts to secure the assent of both parties to arbitration; (3) to prepare, before March 1, 1940, a comprehensive plan for the establishment of a permanent policy for the amicable adjustment of all maritime disputes and for the stabilization of maritime labor relations.

During the board's first 6 months of operation it mediated a number of disputes on the Atlantic, Gulf, and Pacific coasts. A good deal of the board's attention was devoted to a study of the general labor situation within the industry in preparation for the recommendations it must make by March 1940.

Federal Conciliation Service.—The oldest Federal agency dealing with employer-employee relations is the United States Conciliation Service, created in 1913. In the interests of industrial peace, 40 conciliators were actively at work during 1938 answering calls from employers and workers throughout the country to mediate in their disputes and to help bring about settlements where these disputes had resulted in strikes. In a number of instances the disputants asked that the Service appoint one of its commissioners to act as arbitrator.

During the year, the United States Conciliation Service handled 1,765 disputes, involving a million and a half workers. These included strikes and lock-outs as well as threatened strikes and controversies which had not yet reached the stage of strike action. In addition to the handling of disputes after they arose, the Service held many conferences and investigated numerous complaints, in order to prevent the occurrence of disputes and to bring about better understanding between employers and workers.

National Mediation Board.—The year 1938 marked the fourth year of the existence of the present National Mediation Board. The Railway Labor Act as amended in 1934 gave authority to the National Mediation Board to investigate and dispose of disputes among railway employees over questions of representation and the making and revising of agreements. It also established the National Railway Adjustment Board to settle disputes arising out of individual grievances or out of the meaning or application of labor agreements. In 1936 the duties of the board were extended to cover air transportation.

Despite the fact that several serious crises arose during the year between carriers and railway unions, there were no disputes which caused interruption of the railway and air services. The most important case (as regards number of employees and financial cost) which has ever been handled since the enactment of the act arose during the spring of 1938, when the managements of all class I railroads served notice of their intention to reduce rates of pay 15 percent. This would have amounted to a wage reduction estimated at \$250,000,000. Direct negotiations between representatives of the unions and carriers, as well as efforts of the Mediation Board, failed to bring about a settlement. The President thereupon created an emergency board as provided under section 10 of the act.

The board held public hearings and investigated the financial problems of the railroads as well as the wages of the workers. The board's report concurred in the carriers' contention as to the grave financial situation of the industry. Nevertheless, it found no justification for wage reductions, since "the level of wages of railroad labor is not high when compared to wage levels in other industries." The board asserted that "the carriers will need to adjust themselves by means more heroic than wage reductions."

Acting on the recommendation of the board, the railroads, on November 4, withdrew their orders for the wage reduction and a threatened strike was thus averted.

National Labor Relations Board.—The National Labor Relations Board functions in two capacities: (1) It certifies, either with or without the holding of elections, what unions shall represent employees in their negotiations with employers; (2) it deals with cases of unfair labor practices as defined in the act—that is, employers' interference with workers in their efforts to organize and bargain collectively. Following the first decisions of the Supreme Court, which determined the validity of the act, in April 1937, there was a tremendous increase in the number of cases brought before the Board, evidencing a growing tendency, where the issue of union organization was involved, for workers to turn to the Board rather than to resort to strikes.

During the fiscal year ending July 1, 1938, the Board closed 8,851 cases involving over 1,800,000 workers. Of these, 5,694 were com-

plaints of unfair labor practices and 3,157 involved representation issues. Over 96 percent of the complaint cases were withdrawn or settled in an informal way through voluntary cooperation of the employer, the complaining union, and the agent of the Board. Elections were held in 1,152 of the representation cases. Of the total 343,587 valid votes cast in these elections, 67.8 percent were in favor of trade-unions, 14.4 percent in favor of nonaffiliated unions, and 17.8 percent were against all types of labor organizations.

Employer opposition to the National Labor Relations Act and its administration did not abate during the year. The earlier criticism tended to be directed toward the Board, and charges were made that the findings of the Board were based on misinterpretations of the act. As the Supreme Court rendered more and more decisions sustaining the Board's orders, the general line of criticism shifted from the Board to the act itself. As a consequence, some employers' associations at the close of the year were proposing major amendments to the act which they hoped would be given consideration in the next Congress.

Added to the voice of employer opposition was that of the A. F. of L., as expressed in public pronouncements of its officials and in convention resolutions. During the year A. F. of L. spokesmen showed increasing suspicion and antagonism toward the Board, charging it with bias and prejudice in favor of the C. I. O. and a misuse of power to further "preconceived economic predilections of members of the Board."⁶ Chief among the remedies which the Federation proposed were amendments to the act limiting the powers of the Board in the fixing of the representation unit and a curtailment of the Board's power to invalidate union contracts. It was expected that these proposals, together with others, would be presented to Congress soon after it convened in January.

Management and Labor

One means of learning the general status of the employer-employee relationship at a given time is through the subjects discussed at employers' conferences. Such gatherings reveal not only the general industrial and economic situation but also employers' reaction to governmental and organized labor activity. During the 1920's, for instance, when the Government was relatively silent on matters concerning employer-employee relations and organized labor was not expanding, management representatives devoted most of their group discussions to such matters as labor turn-over, wage-incentive plans, production control, etc.

When, in 1933, the Government began to show an active concern in the condition of labor, and labor itself showed a disposition to expand

⁶ American Federation of Labor. Proceedings of 58th Annual Convention, 1938, p. 344.

its area of influence, employers were faced with new problems. To some employers it seemed a throw-back to war times, when the Government and war labor boards encouraged collective bargaining and set up minimum standards of working conditions. These employers hoped and expected that, as in the war period, the new legislation and labor activity would be temporary and therefore no fundamental changes in management policy would be necessary. Thus, in employers' conferences during 1933-36 there was a good deal of discussion pointing to the unconstitutionality of the National Labor Relations Act, the Social Security Act, and other social legislation.

Some employers maintained, on the other hand, that the very passage of such acts revealed certain weaknesses in industry which it was their job to correct, even though the specific legislation should be changed or annulled. They urged a closer personal relationship between employer and employees. They said the workers should be educated in the fundamentals of the business—"if management talks directly with its men, it will not be necessary for them to turn to outside labor leaders." Foremen should be better trained in personnel dealing—"if grievances are handled promptly there is no need for trade-unions." They advocated improvement in wage-incentive plans and the maintenance of wage differentials—"the American worker is an individualist who is only mildly interested in collective bargaining."

Much stress was laid on the advantages of the employee plant committees or employee-representation plans as an improvement over individual dealing and as a substitute for trade-unions. It was freely admitted that many employers had established such plans merely to give the appearance of conforming to the law. Such employers were criticized and a good deal of time was devoted to discussions on how the employer could make his employee-representation plan function.

Although the lines of discussion in employers' conferences necessarily altered when the Supreme Court validated the N. L. R. A. in the spring of 1937, a change in attitude was not uniformly apparent. There was considerable agreement with speakers who reaffirmed the desirability of maintaining the traditional relationship between the employer and the individual employee—"let your employees feel that you are their natural leader and they will not turn to an outsider." There were expressions of resentment and rebellion—"no matter what the law and courts say, an employer must not condone outside interference with his business." Others, neither so discouraged nor so resentful, suggested that all that was needed was a change in the employee-representation plans; chiefly, a withdrawal of employer financial support and a substitution of employee committees for joint employer-employee committees.

As the months passed, the tone of management conferences somewhat changed. Instead of completely ignoring the existence of trade-

unions, as was done in the 1920's, or mentioning them only with expressions of opposition as was done later, during 1938 there was more and more disposition to accept the collective-bargaining situation and to take it for granted. Significant was one such conference, announced as "The Reconstruction Phase of the Employer-Employee Relationship" which gave as its keynote—

During the past year strikes and other labor disturbances have been frequent and severe. And yet, many leaders in industrial relations feel that industry has definitely entered the "reconstruction phase" in its relationship with workers—that out of the turmoil there has been evolved a set of principles which, admittedly still far from perfect, nevertheless mark out the way to industrial peace.⁷

Many of those responsible for labor relations in their various plants showed a real desire to learn how to fit their personnel policies within a collective-bargaining framework, even though some of the trade-union demands seemed to be in conflict with what formerly had been considered good personnel practice. For instance, in a discussion of seniority and lay-offs, one personnel manager indicated that his firm no longer used the depression period "to clean house by laying off the less efficient" because the unions were too seniority-minded and had objected. He conceded to the union that it was not fair to throw the less competent out of work during slack times when it was most difficult to get another job. In return he had obtained the support of the union for a continuous rating system, with allowance for individual discharges at the end of probational periods or periodic check-ups.

This willingness to adapt new patterns from old, to concede the right of workers to some voice in the making of employment policies, was not universal, however. As is to be expected in the early stages of any drastic change, the year 1938 witnessed many contrasts in the employer-employee relationship among the various industries as well as among plants within an industry. Some employers who had gone so far as to discuss matters with delegates of employees flatly refused to formalize the decision of such discussions in written form.

Even among employers who had signed written agreements there were many contrasts in method of dealing, based in large part on the degree of sincerity with which the employer had accepted the collective-bargaining relationship. In some instances where serious strikes had taken place and the employer had reluctantly signed an agreement, he was able by delay and other tactics to forestall any real collective bargaining in the day-to-day operation of the plant. In some of the larger companies, collective bargaining stopped when the top management and union officials had met on basic wage and hour schedules. No grievance or other employee committees were established, and the foremen continued to function as they had in the past. Contrasts are illustrated by the following instances:

⁷ Conference of the Personnel Division of the American Management Association, Chicago, February 1938.

A large company, as a result of a prolonged strike and the pressure of public opinion, had signed a union agreement. Department supervisors, however, were led to believe that this formal capitulation did not mean much and that they should make every effort to carry on as before. By the terms of the agreement the workers' committee could meet with the plant supervisor on a certain day each month. When, at such meetings, the employees' representatives brought up grievances and suggestions, the supervisor's reply was that all requests should be put in writing and he would submit them to the general manager. A few days or even weeks later a formal letter would reach the committee explaining why the company could not accept the employees' requests. The committee could not even discuss the matter further until the next monthly meeting. Obviously, such a situation is not collective bargaining; it provides for no meeting around the conference table to discuss frankly the pros and cons of disputed issues. This company has experienced a number of strikes since the signing of its agreement.

In contrast is another large concern which throughout its history had vigorously fought trade-unions. In 1937 the management decided to reverse its position and to give collective bargaining a trial. An agreement was signed without the union calling a strike. Convinced that the management was sincere, most of the plant supervisors tried to adapt themselves to the new situation. In view of the fact that a good many of them had been appointed to supervisory positions as much for their antiunion attitude as for their working ability, this adjustment was no small task. The employees also realized that they had much to learn. In one plant of this company the union set up a "school" for the members of its grievance committees. Some of the foremen requested that they be allowed to attend. For the rest of the course, union committeemen and foremen voluntarily met several evenings a month to discuss techniques of settling disputes and grievances.

In general, it can be said that 1938 was a year of transition in management-employee relationship. In contrast to those firms which were continuing their belligerent opposition to any kind of collective bargaining, was an increasing number of employers who had accepted unionism and were making a sincere effort to adjust their personnel policies and methods to the new situation. Between these extremes were employers who felt that open antagonism was unwise but who hoped the current union activity was a passing phenomenon. These pursued different courses. Some gave a semblance of meeting the demands of their employees by going through the formality of signing a union agreement, but in one way or another set up barriers to any real day-to-day collective-bargaining relationship. Others made unusual efforts to improve plant working conditions and personnel

policies with the hope that their employees gradually would lose interest in trade-unions.

Union Membership and Agreements

Although business conditions in 1938 were not conducive to any great extension of union organization, the unions were able not only to maintain their relatively high 1937 membership figure but to make increases in certain trades and areas. Membership reported to the 1938 conventions of the A. F. of L.⁸ and the Congress of Industrial Organizations⁹ totaled nearly 7¼ million. With the addition of the nonaffiliated railroad unions, the total trade-union membership in 1938 was somewhat over 8 million.

The momentum of the 1937 organization drives in the mass-production industries extended into some of the service and retail trades and professions. In 1938 the most marked gains in union membership were among electrical workers, canneries, machinists, truck drivers, packing-house workers, bakeries, laundries, hotels and restaurants, retail trade, and certain sections of commercialized agriculture. There was considerable union increase, also, among clerical and professional workers, such as actors, insurance agents, State and county employees, teachers, and newspaper reporters.

Collective agreements naturally followed in the wake of union membership. In industries previously organized, unions in most cases were able to maintain and renew their contracts without wage reductions. In addition, many new agreements were entered into during 1938, some of these covering a considerable number of workers.

Probably the most notable was that between the United Mine Workers and the Harlan County Coal Operators. The signing of this agreement, on August 27, brought to a close a long history of open hostility between them. Previous to the signing, the Federal Department of Justice had indicted a number of the coal operators and sheriffs on charges of conspiracy to suppress the bargaining rights of the miners.¹⁰ The three months' trial ended in a hung jury. Meanwhile the National Labor Relations Board had issued an order to one of the companies, and had been sustained by the circuit court, to reinstate with back pay a number of its employees who had been discharged for union activity. The United Mine Workers agreed to drop its charges when the Coal Operators Association signed the agreement, which follows the general terms of the Appalachian agree-

⁸ The figures given here represent the voting strength of the affiliated unions: that is, the average paid-up membership to the A. F. of L. for the fiscal year.

⁹ Membership given as of October.

¹⁰ The National Labor Relations Act provides for no criminal penalties. In this case the Government invoked an act of 1870 forbidding conspiracy to prevent citizens from exercising rights guaranteed under Federal laws and the Constitution.

ment to which most of the bituminous-coal employers adhere. Thus the last important nonunion section of the coal industry was brought under collective bargaining.

Among other agreements covering relatively large numbers of workers were those with the General Electric Co., the Postal Telegraph-Cable Co., the National Association of Retail Meat Dealers, and 17 truck companies in the Middle West. The agreement formally consummated in January 1939 between the Postal Telegraph-Cable Co. and the American Communications Association (C. I. O.) covers about 13,000 employees. The union had been certified by the National Labor Relations Board after an election in a unit which is geographically the largest yet found appropriate by the Board. It covers the company's entire continental system, with the exception of certain offices for which the Commercial Telegraphers Union (A. F. of L.) has contracts.

The contract with the Retail Meat Dealers and the Amalgamated Meat Cutters and Butcher Workmen of North America (A. F. of L.) includes uniform provisions for 30,000 retail meat dealers on all points except wage rates, which are negotiated locally by the unions and meat dealers' associations. The agreement of the International Brotherhood of Teamsters, Chauffeurs, Stablemen and Helpers of America covers interstate truck operators in 12 States extending from northern Kentucky to Nebraska.

Extent of Collective Bargaining in 1938

The year closed with wide differences in the extent of collective bargaining in the various industries of the country. The situation varied from almost completely unionized working conditions to industries, trades, and professions where a negligible number of the employees worked under collective-bargaining conditions.

Outstanding among the industries almost entirely under written agreements were coal mining, railroad train and engine service, breweries, flat glass, newspaper printing, and men's and women's clothing. Musicians, actors, and radio artists and performers were almost all working under collective-bargaining conditions. The automobile industry, with the exception of the Ford Motor Co., was almost entirely under union agreements, as was also the steel industry with the exception of half a dozen of the medium-size concerns, and the rubber industry with the exception of the Goodyear Tire & Rubber Co. and a few small plants.

At the other extreme were the industries where there was little, and in some cases almost a complete absence of, collective bargaining. Among these were agriculture, domestic service, aircraft manufacturing, chemicals, iron mining, quarrying, most of the service indus-

tries and trades, retail and wholesale trade, and office and professional workers.

There were wide sectional differences in the degree of unionization within a number of the industries. For instance, while longshoremen and seamen on the Atlantic and Pacific coasts were generally under agreements, there were few agreements on the Gulf coast or Great Lakes. The Butte, Mont., area was much more strongly organized than the rest of the metal-mining industry, and the cigar industry remained largely unorganized, with the exception of that in Tampa, Fla. Most of the union agreements in the air transport, lumber, fishing and canning industries were with companies on the west coast. Organization of building-maintenance workers took place predominantly in New York City and a few other large cities. The hosiery industry in and around Philadelphia was almost entirely under agreement, as were also most of the full-fashioned hosiery mills in the North. However, agreements were almost nonexistent in the seamless branch of the industry, especially in the South.

The approximate extent of union agreements in the various industries and trades, based on the proportion of the workers covered, is given in the table following.

Prevalence of Written Union Agreements, in 1938, Within Various Industries

Almost entirely under written agreements	Large proportion under written agreements	About half under written agreements	Moderate proportion under written agreements	Almost entirely without written agreements
Breweries. Clothing, men's (outerwear and furnishings). Clothing, women's (outerwear and underwear). Coal mining. Furs. Glass (window, plate, and other flat glass except glassware). Musicians. Newspaper printing and publishing. Performers (legitimate stage, vaudeville, burlesque, grand opera, motion pictures, and radio performers). ¹ Railroad train and engine service.	Aluminum (refining and fabrication). Automobiles and parts. Book, magazine, and job printing and publishing. Building construction. ¹ Cement manufacture. City passenger transport (street railway, elevated, bus, and subway). Electrical equipment (includes radios). Hats and millinery. Iron and steel. Longshore. Machinery and parts. Maritime transport (licensed and unlicensed personnel). Motion-picture production (except actors). Railroad clerical service. Railroad shops and maintenance. Rayon yarn. Rubber (tires, inner tubes, boots, shoes, and other rubber goods). Stoves. Tailors (merchandise employed in retail trade).	Baking (bread, cracker, and cake—includes route salesmen). Bus transport, intercity. Glassware. Hosiery. Metal mining, nonferrous. Petroleum (crude production and refining). Ship building and repairs (private shipyards). Shoes. Silk and rayon textiles. Trucking (city and intercity—excludes route salesmen). Upholstering and floor-covering (employees in retail trade).	Barbers. ¹ Brick and clay products (includes pottery and chinaware). Butchers (employed in retail trade). Canning (vegetable, fruit, fish, etc.). Cigarettes. Cleaning and dyeing. Coke and manufactured gas. Cotton textiles and small wares. Dyeing and finishing textiles (excluding hosiery). Fishing. Flour and other grain products. Furniture (wood, upholstered and metal). Hotels and restaurants. ¹ Jewelry and silverware. Leather (tanning and leather products other than shoes). Light and power. Lumber and timber products (logging, sawmills, planing mills, and products other than furniture, pulp, and paper, turpentine and rosin). Meat packing. Milk and other dairy products (includes route salesmen). Newspaper office employees (editorial, circulation, and advertising). Pulp and paper products. Sugar refining, cane and beet. Taxicab. Telegraph. Theater —maintenance employees (picture-machine operators, ushers, stage hands, box-office employees). Woolen and worsted textiles.	Agriculture. Aircraft manufacture. Air transport (includes airport employees). Automobile sales and service (includes gasoline stations). Building maintenance (residential and office buildings). Chemicals (paints, varnish, fertilizer, cosmetics, perfume, soap, explosives, drugs, and industrial chemicals). Clocks, watches and precision instruments. Confectionery. Domestic service. Hospitals and similar institutions. Iron mining. Laundries. Office, technical, and professional employees (excludes retail trade, theater, newspaper and railroad employees). Quarrying. Retail trade (department, specialty and grocery stores—sales, delivery, and office personnel). Telephone. Turpentine and rosin. Wholesale trade.

¹ Conditions regulated in many cases by detailed written working rules which may be accepted by each employer without being incorporated in an individual written agreement.

² Stage, vaudeville, burlesque and grand opera performers are generally covered by individual contracts with uniform provisions, as agreed upon in collective bargaining.

WAGES AND HOURS IN 1938

By WITT BOWDEN, *Bureau of Labor Statistics*

Outstanding Features

IN SPITE of the severe recession of the early part of 1938, hourly earnings fell but slightly from the comparatively high levels of 1937, and toward the end of 1938 the movement was reversed, notably in the lower-wage groups. Weekly hours, which usually tend to rise when business is expanding, fell slightly in the later months of the year, especially in many of the industries with comparatively long hours. The enactment of the Fair Labor Standards Act, widely recognized as an outstanding event of 1938, was one of a number of measures adopted by the Federal Government and the States for the general purpose of maintaining conditions favorable to fair standards of wages and hours. These measures, although important, may be viewed as supplementing other factors such as collective bargaining.

The most serious problem of wages in 1938 was a result of the curtailment of pay rolls accompanying increased unemployment and part time, but there was a rapid improvement toward the end of the year. Fluctuations in business activity in the field of industrial production are reflected in the Federal Reserve Board's index of production of manufactures and minerals. This index, when adjusted for seasonal variation, stood at 117 (the 1923-25 average equaling 100) in August 1937 and at 76 in May 1938, a fall of about 35 percent. By December the index had regained most of the loss and stood at 104. The fluctuations were much less extreme in many forms of business activity, as, for example, in department-store sales. The index of department-store sales when adjusted for seasonal variations fell from 94 in September 1937 to a low point of 78 in May 1938, a fall of only 17 percent, and rose by December 1938 to 89.

Another outstanding characteristic of the period was the continued growth of labor organizations and the enlargement of the field of collective bargaining. The main effects of these developments in raising wage rates were felt before 1938, but they were apparent in 1938 in checking the downward tendency of wage rates during the decline in business activity. It is probable also that the increased sense of organized strength and responsibility accompanying the more extensive organization of labor and the greater prevalence of collective agreements tended, during the upturn later in 1938, to check strikes and related activities such as are frequently resorted to for raising wages when business conditions are improving.

*Average Hourly Earnings*INDUSTRY AVERAGES IN OCTOBER ¹ 1938

In October 1938 average hourly earnings in all manufacturing industries combined were 63.7 cents. When the various nonmanufacturing industries for which information is readily available are combined for an approximate average of hourly earnings in these industries, the result is almost identical with the figure for manufacturing as a whole. But when the separate groups of industries are considered, wide differences appear. Thus, in the durable-goods manufacturing industries, the average in October 1938 was 71.0 cents, and in the nondurable-goods group, 57.9 cents.² In the 14 groups of manufacturing industries, as classified by the Bureau of Labor Statistics, the averages for October ranged from 87.8 cents in the transportation-equipment industries to 45.6 cents in the tobacco group. In the separate manufacturing and nonmanufacturing industries, average hourly earnings varied in October from 99.1 cents in the printing and publishing of newspapers and periodicals to 25.2 cents in the cottonseed oil, cake, and meal industry.³ (See chart 1.)

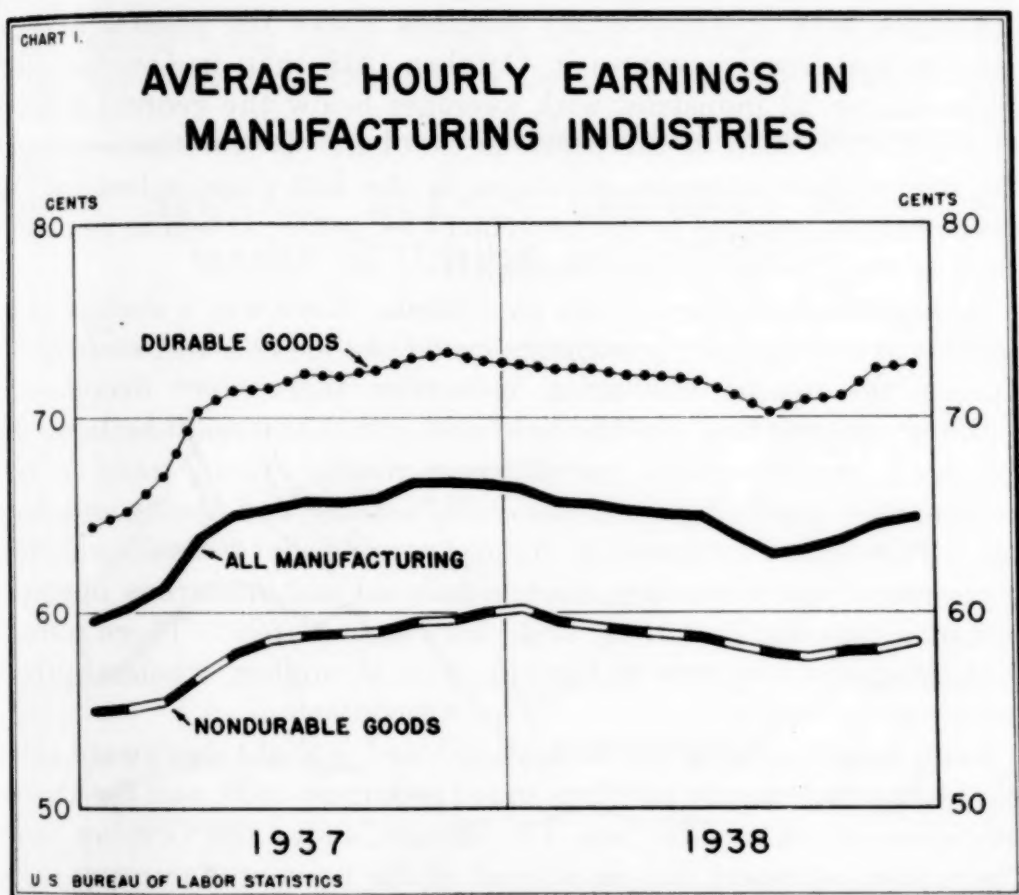
The industries that produce nondurable goods and those that render staple, localized services are among the industries with lowest average hourly earnings. The 10 industries with lowest averages in October 1938 were the following: The cottonseed oil, cake, and meal industry, hotels (year-round), men's furnishings, shirts and collars, cotton goods, laundries, silk and rayon goods, knitted underwear, fertilizers, and canning and preserving. Among the industries with relatively low averages are a few that produce durable goods or products that enter into durable goods and capital equipment. Among these are the furniture, lumber, and brick, tile and terra cotta industries, and quarrying and nonmetallic mining. These, however, are exceptions. The industries with low averages are in a great many instances organized on the basis of large numbers of small establishments and firms and are frequently subjected to competitive pressures on rates of pay as well as prices.

¹ October was chosen for comparison because of the fact that the October figures were the last before the Fair Labor Standards Act went into effect.

² The general averages and the averages of the durable-goods group have been affected by the recent omission of railroad-repair shops. Tractors have been shifted from engines, turbines, etc., to agricultural implements, and stamped and enameled ware has been transferred from the nonferrous metals to the iron and steel group. The group averages now being revised may be slightly affected by these changes. It should be noted also that all figures for the most recent months are subject to minor revisions.

³ The averages were computed from sample data and are necessarily approximations. If exact figures were available, slight changes might occur in the ranking of industries in order of average earnings.

In the combined manufacturing industries and 16 nonmanufacturing industries,⁴ the average number of wage earners in October 1938 was about 14,000,000. About 5 percent of these were in industries paying an average of more than 90 cents an hour; about 10 percent were in industries paying more than 85 cents an hour; somewhat more than 20 percent were in industries paying more than 75 cents an hour; and 53 percent were in industries paying an average of more than 60 cents an hour. Only 5.4 percent of the total number were in industries with average hourly earnings of 40 cents or less. It must be emphasized, however, that these are industry averages and that large numbers of employees in all of the industries received



earnings much below the industry averages.⁵ Economic analysis and the formulation of policies require consideration of the diversities and particularly of the extremes not fully revealed by the industry averages.

⁴ The nonmanufacturing industries that were included are the following, listed in descending order of average hourly earnings in October 1938: Anthracite mining, building construction, bituminous-coal mining, electric light and power and manufactured gas, crude-petroleum producing, telephone and telegraph, electric-railroad and motorbus operation and maintenance, wholesale trade, class I steam railroads, metal-liferous mining, retail trade (other than general merchandising), quarrying and nonmetallic mining, retail trade (general merchandising), dyeing and cleaning, laundries, hotels (year-round). Perquisites are not included in the figure for hotel employees.

⁵ The percentages of wage earners given above do not represent the numbers receiving the average hourly earnings indicated but only the numbers in the industries with indicated averages. In each industry there is of course a wide range of hourly earnings.

CHANGES IN AVERAGE HOURLY EARNINGS, OCTOBER 1937 TO DECEMBER 1938

The larger declines in average hourly earnings between October 1937 and October 1938 were predominantly in the industries with comparatively low rates of pay. Thus in manufacturing industries, declines materially larger than in manufacturing as a whole occurred in shirts and collars, cotton goods, silk and rayon goods, cotton small wares, woolen and worsted goods, dyeing and finishing textiles, women's clothing, and radios and phonographs. In the nonmanufacturing industries, also, the largest declines were in the industries with relatively low rates, although year-round hotels and laundries were exceptions. Among 52 manufacturing and nonmanufacturing industries with average hourly earnings above the general average, only 23 had lower averages in October 1938 than in October 1937; while among 52 industries with averages below the general average, 41 were lower than in the previous October. It was the severity of the competitive pressure on wages in the low-wage industries that gave decisive impetus to the movement for public action in some such form as the Fair Labor Standards Act.

In manufacturing industries as a whole, there was a decline of 4.4 percent in average hourly earnings from October 1937 to October 1938. Among the nonmanufacturing industries there were decreases in building construction, electric light and power and manufactured gas, telephone and telegraph, metalliferous mining, retail trade in both its branches, quarrying and nonmetallic mining, and dyeing and cleaning. There were increases in hourly earnings in anthracite mining, crude-petroleum producing, electric-railroad and motorbus operation and maintenance, laundries, and year-round hotels. There were no changes in the averages in bituminous-coal mining, wholesale trade, and steam railroads.

In all manufacturing industries combined, a slight downward movement of average hourly earnings ended in August 1938, and the December figure of 64.8 cents was 1.7 percent above the October figure. There were increases also in several of the nonmanufacturing industries, ranging from 1.3 percent in quarrying and nonmetallic mining and in year-round hotels to 2.9 percent in crude-petroleum producing. In some of the nonmanufacturing industries there were declines, notably in the general-merchandising branch of retail trade, but this reduction may be accounted for by the comparatively low-paid seasonal employment in general merchandising in December.

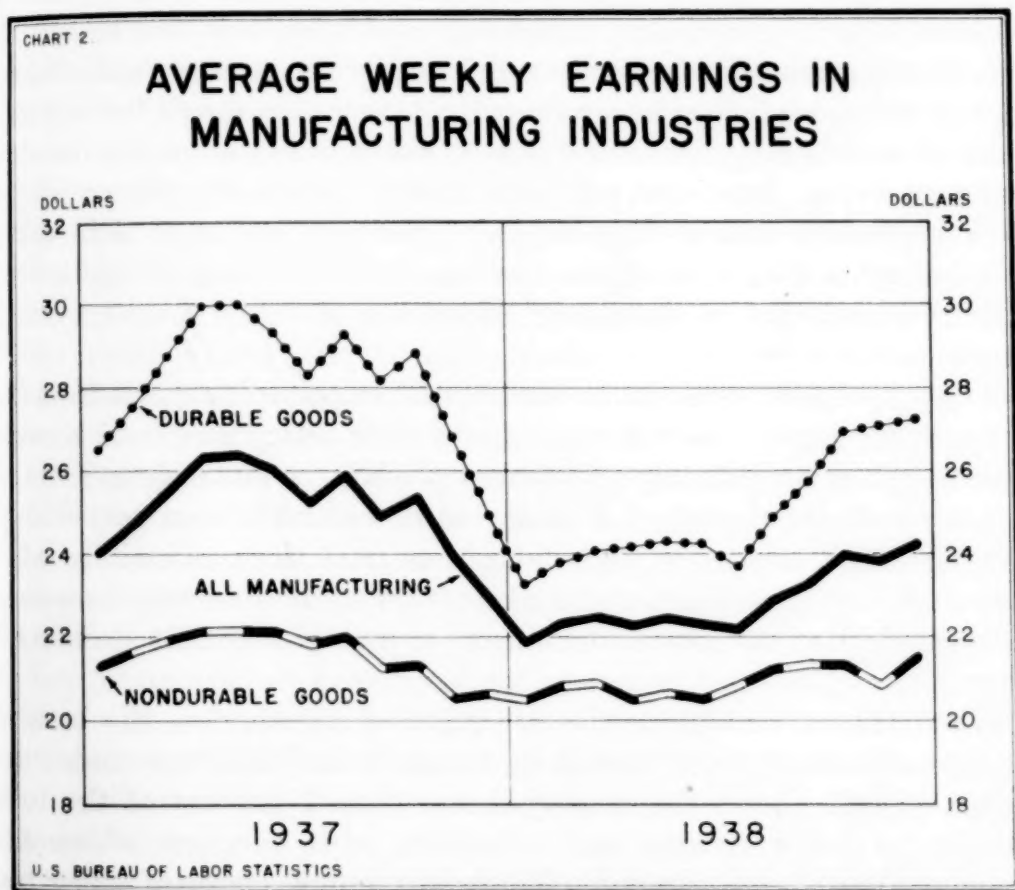
The industry averages afford incomplete evidence regarding the effects of the Fair Labor Standards Act on wages, for in most industries the number of workers who were paid at rates below the minimum of the law was so small that an increase in their earnings to the minimum had no marked effect on the general average. It is nevertheless

significant that in the three manufacturing industries with lowest hourly earnings in October 1938 (cottonseed oil, cake and meal, men's furnishings, and shirts and collars), the increases from October to December were much larger than the increases in manufacturing as a whole. Other industries with relatively low average hourly earnings that showed increases significantly larger than the increase for manufacturing as a whole were canning and preserving, cigars and cigarettes, knitted outerwear, knit cloth, and chewing and smoking tobacco and snuff.

Average Weekly Earnings

INDUSTRY AVERAGES IN OCTOBER 1938

In manufacturing industries as a whole, average weekly earnings in October 1938 were \$23.95. In the durable-goods industries, the



average was \$26.95, and in the nondurable-goods industries, \$21.35. There are 14 main groups of manufacturing industries as classified by the Bureau of the Census and the Bureau of Labor Statistics. Average weekly earnings in October 1938 ranged in these 14 groups from \$33.88 in the manufacturing of transportation equipment to \$16.65 in the textile-fabrics group. In the 16 nonmanufacturing industries previously mentioned (footnote 4), the highest average was \$33.81 in

crude-petroleum producing and the lowest (other than in year-round hotels, affected by perquisites) was \$17.24 in laundries, but this last figure was only a little below the average of \$17.62 in the general-merchandising branch of retail trade. In the separate manufacturing and nonmanufacturing industries, the highest average was \$37.25 in newspapers and periodicals, and the lowest was \$12.84 in shirts and collars.

Six of the 10 industries with highest average weekly earnings in October 1938 also had highest average hourly earnings during the same month. These were newspapers and periodicals (with the highest average, namely, \$37.25), automobiles, petroleum refining, electric light and power and manufactured gas, beverages, and rubber tires and inner tubes. The last-named industry, with an average of \$31.25, was the lowest among the high 10. The other 4 industries among the 10 were crude-petroleum producing, electric-railroad and motorbus operation and maintenance, explosives, and telephone and telegraph. The 10 industries with lowest average weekly earnings were shirts and collars, cottonseed oil, cake, and meal, cotton goods, men's furnishings, knitted underwear, year-round hotels, silk and rayon goods, canning and preserving, fertilizers, and cigars and cigarettes. The range of weekly earnings among these 10 industries was from \$12.84 in shirts and collars to \$16.77 in cigars and cigarettes. These 10 industries, with the exception of cigars and cigarettes, also had lowest average hourly earnings.⁶

Average weekly earnings, as computed from sample reports from the different industries, vary from industry to industry and from time to time in the same industry on account of changes not only in rates of pay but in hours of work. Average hours worked in turn vary widely because of differences in such factors as part time, overtime, labor turn-over, and seasonality, which affect different industries in widely different degrees and the same industry to a varying extent at different times.

When the various industries are grouped together on the basis of \$2 intervals in average weekly earnings, it is found that industries with averages above \$36 employed less than 1 percent of the total number of wage earners and industries with averages above \$32 employed less than 9 percent. There was a high degree of concentration of employees in the industries with averages between \$24 and \$32, almost 60 percent of the total number being employed in these industries. About 22 percent of all employees were in industries with

⁶ In the case of average weekly earnings as of average hourly earnings, minor differences may in some instances be due to the impossibility of obtaining perfectly representative samples. These, if available, might require slight changes in the ranking of some of the industries. The general averages and the averages of the durable-goods group have been altered by the recent omission of railroad-repair shops. Minor revisions now under way may slightly affect some of the group averages. All figures for the most recent months are subject to minor revisions.

averages of less than \$20 per week. Less than 1 percent of the total number were employed in industries with averages of less than \$14. These percentages, it is important to observe, do not represent the number of workers receiving the average weekly earnings indicated but only the number of workers in the specified industries. The averages, that is to say, are industry averages. In each industry there is of course a wide range of weekly earnings.

CHANGES IN MONEY EARNINGS AND IN "REAL" EARNINGS

When there is a significant change in the prices of goods and services bought by wage earners, the accompanying changes in money earnings require adjustment to price changes for ascertaining the trend of "real" earnings. In March 1938 the Bureau of Labor Statistics index of cost of living was 83.0 (the 1923-25 average being 100); in June it was 83.3; and in September and December, 82.7. These figures indicate a slight decline from the 1937 average of 84.3, and the purchasing power of the wage earner's dollar was therefore somewhat greater in 1938 than in 1937. But money earnings per week in most industries fell with reductions in working time, and real weekly earnings were somewhat lower in 1938 than in 1937.

Changes in money earnings during the year were affected to some extent by changes in rates of pay, reflected in average hourly earnings. More significant, however, were the changes in average hours worked. These were mainly an accompaniment of fluctuations in business conditions, although there were some reductions in normal or full-time hours toward the end of the year for conformity to the Fair Labor Standards Act. The comparability of average weekly earnings in different industries and in the same industry at different times is affected by seasonal variations. In highly seasonal industries the average depends vitally on whether a particular month falls within the period of peak activity or during some other period of the year. In the production of beverages, for example, October is not a peak month. In July, a peak month in this industry, average weekly earnings were \$34.73 as compared with \$32.50 in October, in spite of the fact that average hourly earnings in October were slightly higher than in July.

Average weekly earnings are significant for ascertaining the general trends of earnings, and when such limitations as seasonal variations are duly recognized, they are significant also for comparing the various industries and industry groups. Industry averages, however, whether of weekly earnings or of hourly earnings or of weekly hours, must be supplemented by information relating to diversities within the industries when it is desired to analyze the problems of policy relating to wages and hours. These problems are found especially

in the extremes of earnings and of hours in particular portions of industries or in particular establishments, regions, or types of employment. Typical diversities will be discussed later.

Hours of Labor

INDUSTRY AVERAGES IN OCTOBER 1938

In manufacturing industries as a whole, average weekly hours worked in 1937 ranged from 41.0 in March to 34.4 in December. In January 1938, the average fell to 33.2 and thereafter until July it fluctuated narrowly between 34 and 35 hours. In August there was an upturn to 36.3 hours and a further rise to 37.4 in October, followed by a decline to 36.5 in November. In October 1938, in the separate manufacturing industries, average weekly hours were shortest in the locomotives industry (29.2), and ranged upward to 51.3 in the cottonseed oil, cake, and meal industry. In the principal nonmanufacturing industries, the range in October 1938 was from 26.8 hours in bituminous-coal mining to 46.7 hours in year-round hotels.

Most of the figures relating to hours, as published by the Bureau of Labor Statistics, are average hours worked and not full-time or regularly scheduled hours of shifts or of plant operation. These averages of hours worked are computed from extensive reports of employment and man-hours in a large number of industries. Average hours worked range widely from industry to industry and vary from month to month, and the changes do not conform to changes in scheduled or full-time hours. This is explained by variations in part time, overtime, labor turn-over, and similar factors.

CHANGES IN HOURS UNDER FAIR LABOR STANDARDS ACT

In the manufacturing industries and the principal nonmanufacturing industries combined, about 60 percent of the wage earners in October 1938 were in industries with average hours above 39 per week, about 50 percent were in industries with averages above 40 per week, and about 45 percent were in industries with averages above 41 per week. The goal set with respect to hours by the Fair Labor Standards Act relates not to average hours actually worked but to normal or regularly scheduled hours. Average hours actually worked are usually not less than 10 percent below scheduled hours, and the latter were therefore materially above the statutory goal or "ceiling" of 40 hours as a maximum, even when the general average only is considered.

The Fair Labor Standards Act became effective October 24, 1938, and the November and December figures reveal a significant reversal of the movement of weekly hours. Since July 1938, the trend had been upward, the figure for July for all manufacturing industries being 34.7 hours, and for October, 37.4 hours. The average for November

was 36.5 hours. It is perhaps particularly significant that in most of the manufacturing industries with highest average weekly hours in October 1938, there were significant declines between October and November. Thus, in cottonseed oil, cake, and meal, hours fell from 51.3 to 44.7; in the butter-manufacturing industry, from 46.6 to 45.8; in the flour-milling industry, from 45.2 to 41.6; in jewelry manufacturing, from 45.2 to 39.2; in millwork, from 42.4 to 39.7; in paper boxes, from 42.2 to 40.4; and in sawmills, from 40.9 to 37.0. It is not possible to isolate seasonal and special factors completely, but there is reason to conclude that the Fair Labor Standards Act had an effect on the averages, especially since there was an upward trend in business activity, which is normally accompanied by a rise instead of a fall in average weekly hours.

The continued upturn of business through the middle week of December (the week usually reported by employers to the Bureau of Labor Statistics) naturally tended in most industries to lengthen the average working week. Thus, in the general-merchandising branch of retail trade, hours rose from 39.0 in November to 41.0 in December. Nevertheless, in 7 of the 16 nonmanufacturing industries previously mentioned (footnote 4) there were declines in hours. In manufacturing as a whole, the average rose from 36.5 in November to 37.1 in December. In the separate manufacturing industries, 6 of the 10 industries with highest hours in October 1938 had lower averages in December than in November.

Variations in Weekly Pay Rolls

Weekly pay rolls in most industries had an unusually wide range during the years 1937 and 1938. The industry with the largest variation between January 1937 and December 1938 was the beet-sugar industry. In this industry the difference between the high month (November 1937) and the low month (January 1937) was 85.7 percent. This industry, however, has an extreme seasonal variation. In the case of locomotives, the industry with the next largest variation in pay rolls, the high month was October 1937 and the low month was October 1938. In this case, the divergence of 80.1 percent of the low month from the high month was obviously not seasonal but mainly a reflection of general business conditions and of particular conditions that affect such an exceptionally specialized type of product as locomotives, dependent largely on special orders rather than on the general market demands for its rate of activity at any given time. Rates of pay had no significant role in the pay-roll variations in this industry, for average hourly earnings in October 1937 were 77.4 cents, and in October 1938, 75.9 cents. Most of the industries with extreme variability in pay rolls were either industries of a highly seasonal character,

such as beet sugar, canning and preserving, and anthracite mining, or were industries that are very susceptible to fluctuations in business activity. The latter were in most cases connected with the production either of capital goods or of durable consumers' goods, such as locomotives, automobiles, radios and phonographs, iron and steel forgings, and carpets and rugs.

The general effect of the downturn in pay rolls beginning in 1937 was moderated by the occurrence of the low point at different times in different industries. During the period from January 1937 to December 1938 the high month in the nonmanufacturing industries ranged from March 1937 in bituminous-coal mining to December 1938 in the general-merchandising branch of retail trade, the late summer and fall months of 1937 being preponderantly the high months. In contrast, the high month in 9 of the 14 main groups of manufacturing industries occurred during March to May 1937. The low month in 8 of the 16 nonmanufacturing industries was either January or February 1937, although in the largest industry, retail trade, the low month was August 1938. In contrast, the low month in the 14 main groups of manufacturing industries with 3 exceptions ranged from January to July 1938.

The industry with the smallest degree of variability in respect to pay rolls was electric-railroad and motorbus operation and maintenance. In this industry the low month, January 1937, was only 7.0 percent below the high month, August 1937. This minor difference was partly a result of the fact that average hourly earnings were somewhat higher in August (the high month) than in January (the low month), the figure for August being 68.5 cents, and for January, 66.1 cents.

The industries with relatively small variations in pay rolls were in most instances either service industries such as electric-railroad and motorbus operation and maintenance, wholesale and retail trade, year-round hotels, laundries, and telephone and telegraph, or industries that produce directly for the consumer market in the general field of nondurable products, as, for example, newspapers and periodicals, electric light and power and manufactured gas, chewing and smoking tobacco and snuff, druggists' preparations, petroleum production, and the staple foods.

Variability of Capital-Goods Industries

There is thus a marked contrast in the variability of pay rolls and volume of activity in the industries that produce capital goods and consumers' durable goods, on the one hand, and the industries that are connected with the more staple services and nondurable consumers' goods, on the other hand. The significance of this contrast has be-

come increasingly apparent in recent years for various reasons, particularly because of the progressive difficulty in expanding the demand for the products of capital-goods industries, on which employment and pay rolls have vitally depended. There has been a progressive narrowing of frontiers throughout the world and an intensification of competition in the world's capital-goods markets. There has also been an increasing emphasis on machines and techniques that economize capital investments. The former conditions of demand for non-military capital goods therefore no longer exist. As a result, some of those who under former conditions would have found employment in making capital goods are unemployed or dependent on relief work unless they can find some new source of opportunity; and this is the condition confronting also that proportion of consumption-goods employees formerly required to supply the demands of those displaced from the capital-goods industries.

The restriction of demand for capital goods and investments is more than cyclical, as it is associated with a world-wide slowing up of the rate of growth of unsettled or slightly industrialized regions, of population, and of world economy. These circumstances, combined with the development and increased use of capital-saving techniques, have tended to create a continuing, long-term stagnation in world markets for capital goods and in world outlets for investment of income not needed for consumption by those who receive it. The accompanying problems of unemployment and of inadequate working-class income have therefore called for public action, to an unprecedented extent, in the form either of direct relief or of employment by the use of public funds.

Although the wide range of the low month in the various branches of employment cushioned the decline in pay rolls, the severity of the decline became so apparent early in 1938 as to lead to a large expansion of emergency employment. The expansion of emergency pay rolls financed by public funds was mainly in projects operated by the Works Progress Administration. In October 1937, the pay rolls thus financed totaled \$81,486,784. Throughout most of 1938 there was a progressive increase, the total in October 1938 being \$170,347,326. There was a further slight increase in November.

Problem of Extremes of Wages and Hours

NATURE OF THE PROBLEM

The wide ranges in the industry averages of hourly earnings, of weekly earnings, and of weekly hours were described in earlier paragraphs. In summary, the range of hourly earnings in October 1938 was from 99.1 to 25.2 cents; the range of weekly earnings was from

\$37.25 to \$12.84; and the range of weekly hours was from 26.8 to 51.3 hours.

These averages, however, do not reveal the extent of the diversity in wages and hours. In a given industry there is a wide range of average earnings and average hours in the various establishments. There are still wider variations among the occupations, classes of workers, and types of employment. There are also differences in wages and hours that are characteristic of regions, communities of different sizes, establishments of different sizes, and types of business organization.

Most of these diversities are normal characteristics of a complex and highly diversified economy. The principal problems of policy relating to wages and hours arise from the extremes, and especially from the lower extremes of wages and the upper extremes of hours. Many wage earners, even in the industries with relatively high average wages, have annual earnings too low for the maintenance of generally recognized minimum standards of living. The lower levels of wages and the upper extremes of hours in a given industry or region tend to force wages down and hours up in other industries and areas. The adverse effects of the lower extremes of wages on the national economy are now more apparent than formerly. Since employers and investors are no longer able to depend as formerly on expanding external markets for the sale of capital goods and the investment of their funds, wages must now in a much more vital sense be viewed not only as production costs but also as consumer income.

RANGE OF UNION RATES IN THE BUILDING TRADES

The variations in rates of pay are illustrated by union scales of wages in the building trades. The average union rate per hour on June 1, 1938, for the journeyman trades was \$1.465, while the union rate average for helpers and laborers was 85.1 cents. Average hourly earnings for all workers, both union and nonunion, in building construction in June 1938 are estimated to have been 90.4 cents. Among journeymen, the highest average union rate was that for plasterers, \$1.688, but only 13.1 percent of union plasterers received rates ranging from \$1.60 to \$1.70, the wage interval in which the average was located. The lowest average union rate of helpers' and laborers' occupations was that for building laborers, which was 77.1 cents, and the lack of central tendency of the average is indicated by the fact that only 7.4 percent of union building laborers received rates between 75 and 80 cents, the interval in which the average was located. Among union building-trades journeymen, the average hourly rate in the cities covered by the Bureau's annual survey of union scales ranged from \$1.740 in New York City to 86.7 cents in

York, Pa. The average rate for helpers and laborers ranged from \$1.119 in New York City to 42.6 cents in Jacksonville, Fla. There was of course a much wider range among the separate occupations both of the journeyman group and of the helpers and laborers groups.

ENTRANCE RATES OF COMMON LABOR

The diversity of earnings is also significantly illustrated by the Bureau's annual survey of average hourly entrance rates of adult male common laborers. Between July 1937 and July 1938 there was virtually no change (an increase of less than 1 percent) in the general average for the 20 industries included in the survey. But when the separate industries are considered and the rates are analyzed separately for the North and West and the South and Southwest, the changes range from a decline of 7.6 percent in the fertilizer industry in the North and West to an increase of 12.1 percent in the leather industry in the South and Southwest. Although the general average in July 1938 was 50.8 cents, 3.3 percent had entrance rates under 25 cents, 8.0 percent under 30 cents, and 16.6 percent under 40 cents, these being mainly in the South and Southwest. But the preponderance of the lower-rate workers in the latter region is in part a result of the prevalence in that region of industries that have relatively low rates in other regions as well as in the South.

The nature of the industries predominant in the several States is one cause of the wide variations by States. The highest average entrance rate among the States in July 1938 was 62.0 cents, in the State of Washington; and the lowest was 27.2 cents in Florida. The rates ranged very widely. Thus, one-tenth of 1 percent of common laborers in the South and Southwest received less than 12.5 cents per hour as an entrance rate, while in the North and West four-tenths of 1 percent received between \$1 and \$1.10, and a few were paid more than \$1.10.⁷

WAGES OF FARM WORKERS

The average number of hired farm workers has ranged in recent years in the neighborhood of 2,500,000, but the work is highly seasonal, the smallest number being employed in January and the largest number in July or October. The revised estimate of average pay per month with board fell from \$29.84 in October 1937 to \$28.25 in October 1938. The corresponding figures without board were \$38.11 and \$36.09. The daily rate with board fell from \$1.46 in October 1937 to \$1.36 in October 1938. The rates without board fell from \$1.73 to \$1.59. It is to be noted that these figures are not average

⁷ Monthly Labor Review, January 1939, pp. 162-175: "Entrance Rates of Common Laborers, July 1938," by Edward K. Frazier and Jacob Perlman.

earnings but average rates of pay. Since farm labor is highly seasonal and to a considerable extent merely casual, average monthly earnings were much lower than monthly rates of pay.

The United States Bureau of Agricultural Economics, which makes these estimates, also publishes figures of average rates for the nine geographic divisions as classified by the Bureau of the Census. Average regional rates per month with board ranged in October 1938 from \$41.83 in the Pacific States to \$15.68 in the East South Central States. The average rate per month without board was \$62.05 in the Pacific States, and the lowest average was \$22.66 in the East South Central States. The highest and lowest averages of daily rates were in the same geographic divisions as were the highest and lowest monthly rates. These rates with board were \$2.02 and \$0.77, and without board \$2.71 and \$1.03.

EXTREMES AS ILLUSTRATED BY THE COTTON-GOODS, FURNITURE, AND
FERTILIZER INDUSTRIES

In August 1938, about one-twelfth of the wage earners in the cotton-goods industry received less than 25 cents; almost a fifth received less than 30 cents; about half received less than 35 cents; and approximately 70 percent received less than 40 cents. Special surveys of earnings in April 1937 and August 1938⁸ reveal the wide range of hourly earnings and also an increase, between April 1937 and August 1938, in the proportion of workers in the lower ranges of earnings. In both months a few employees, but materially less than 1 percent, received less than 12.5 cents per hour and a still smaller proportion received 97.5 cents and over. In April 1937 about 60 percent of the workers received earnings ranging from 32.5 to 47.4 cents, and in August 1938 about 63 percent earned from 27.5 to 42.4 cents. Changes affected workers in both the North and the South. The proportion of workers receiving less than 30 cents an hour increased in the North from 1.2 percent in April 1937 to 2.7 percent in August 1938, and in the South from 14.4 to 24.2 percent. The proportion of unskilled workers receiving less than 30 cents increased in the North from 3.4 percent in April 1937 to 8.0 in August 1938, and in the South from 32.3 to 46.7 percent. (See chart 3.)

Industries that had average hourly earnings significantly higher than the minimum of 40 cents, proposed as the goal in the Fair Labor Standards Act, had many employees who received much less than 40 cents. Thus, in the furniture industry average hourly earnings have been considerably above 40 cents since 1934 and have risen above 50

⁸ For April 1937 survey see Monthly Labor Review, April 1938, pp. 956-980: "Average Hourly Earnings in Cotton-Goods Industry" (reprinted as Serial No. R. 747); for August 1938 survey see Monthly Labor Review, December 1938, pp. 1239-1249: "Wage Structure in Cotton-Goods Manufacture," by A. F. Hinrichs. For detailed analysis, see U. S. Bureau of Labor Statistics Bulletin No. 663: Wages in Cotton-Goods Manufacturing, by A. F. Hinrichs.

cents. A special survey of the furniture manufacturing industry for October 1937⁹ indicated that in the wood household branch of the furniture industry, 36.7 percent of employees were then receiving less than 40 cents an hour; 24.9 percent were receiving less than 35 cents an hour; 9.5 percent, less than 30 cents an hour; and 3.8 percent, less than 25 cents an hour. In the Southern States, 74.1 percent of employees in this branch of the furniture industry received less than 40 cents an hour, while 9.7 percent received less than 25 cents. Among the unskilled workers in this branch of the industry in the South in October 1937, 97.8 percent received less than 40 cents an hour; 49.0 percent received less than 30 cents an hour; and 25.6 percent received less than 25 cents an hour.

In the furniture-manufacturing industry as a whole, the number earning under 25 cents an hour formed 1.1 percent in the North and 9.6 percent in the South. Workers receiving less than 30 cents an hour were 3.8 percent of the total in the North and 21.7 percent of the total in the South. The corresponding figures for those receiving less than 40 cents an hour were 19.4 and 74.7 percent. These regional differences are not wholly a result of differences in wage rates for the same occupations or types of work. They are partly explained by the fact that there are virtually no southern plants making metal office furniture and public-seating furniture, which are the higher-wage branches of the furniture industry.

In 283 representative establishments included in a special survey of the fertilizer industry in the spring months of 1938, average hourly earnings at that time were 32.6 cents.¹⁰ In these plants, 60.4 percent of all wage earners received less than 32.5 cents an hour. More than two-thirds (68.7 percent) received less than 40 cents an hour, and more than one-fourth (26.1 percent) received less than 25 cents an hour. In the South, 79.7 percent of all workers received less than 32.5 cents an hour, and 35.0 percent received less than 25 cents an hour. In the case of unskilled workers, the percentages were larger.

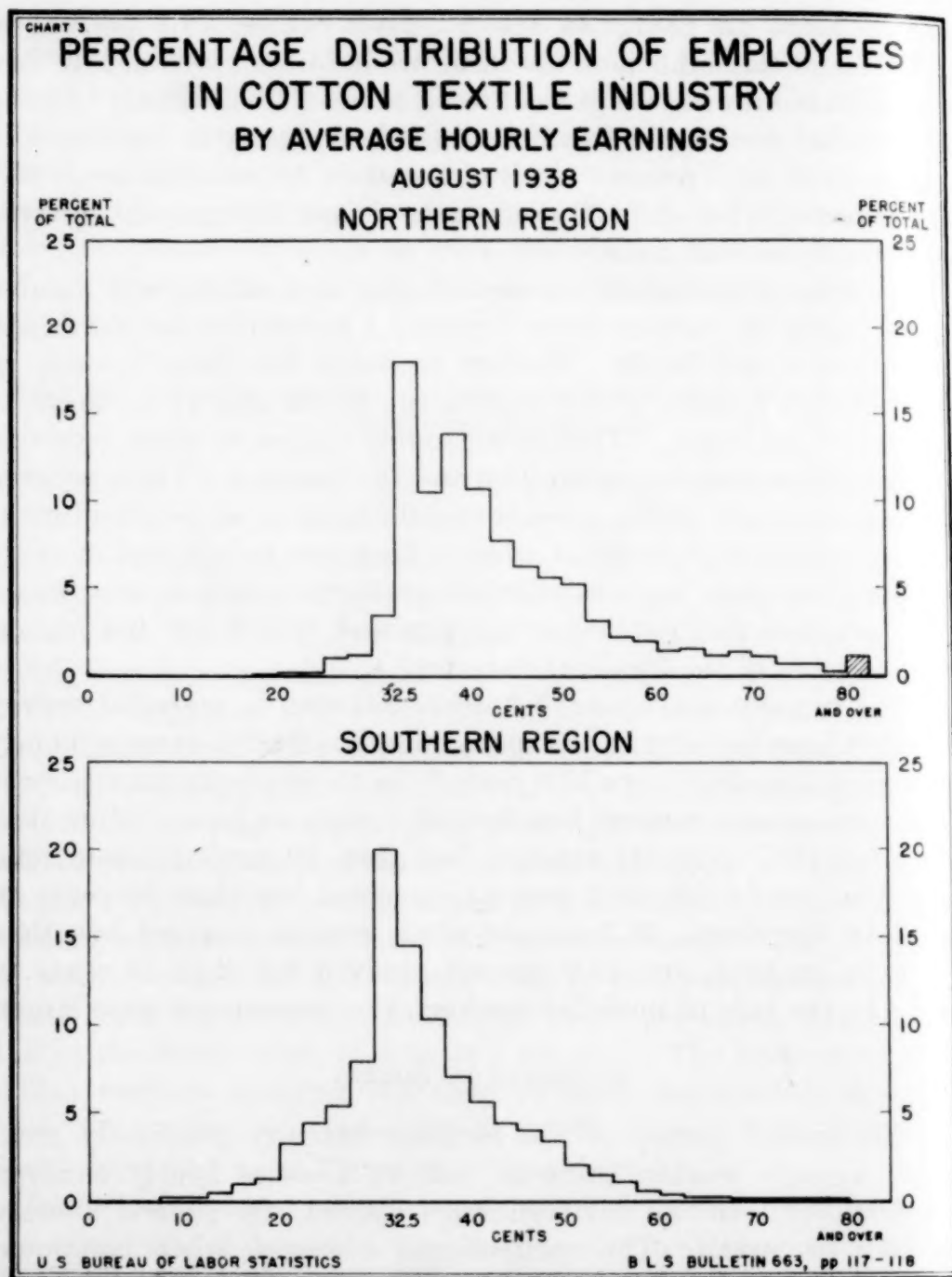
EXTREMES IN HOURS

In the special survey of the fertilizer industry previously mentioned, average weekly hours as well as average hourly earnings ranged widely. In the northern wage district, the general average was 45.2 per week. The occupational averages, when computed separately for white and Negro workers, ranged from 54.3 to 35.6 hours per week. In the case of the upper southern wage district, the general average was 44.9, while the range, when similarly com-

⁹ U. S. Bureau of Labor Statistics. *Average Hourly Earnings in the Furniture Manufacturing Industry, October 1937.* (Mimeographed.)

¹⁰ See "Wages and Hours in the Fertilizer Industry, 1938," on p. 666 of this issue of the *Monthly Labor Review* (reprinted as Serial No. R. 864).

puted, was from 58.0 to 34.7 hours. In the lower southern wage district, the general average was 45.0 and the range was from 60.2 to 34.4 hours. In a special survey of the manufacture of radio transmitters and related products for May 1938,¹¹ it was found that the



full-time working week was prevailing 40 hours, with certain variations above 40. The average hours worked by employees covered ranged from less than 8 to more than 60 hours per week.

¹¹ Monthly Labor Review, September 1938, pp. 611-620: "Earnings and Hours in the Manufacture of Radio Transmitters and Related Products, 1938." (Reprinted as Serial No. R. 787.)

The wide range of average hourly earnings involves serious economic problems because of the fact that the lower averages are not measures either of the comparative efficiency and productivity of the workers or of the comparative utility to consumers of the products of the industries with the lower averages. But some of the gravest problems of substandard wage-earner income are in industries with average hourly earnings that are moderate or even relatively high. This fact became particularly apparent in the hearings of the Emergency Wage Board appointed by the President in connection with the railroad wage controversy of 1938. The Board pointed out that average hourly earnings in railway employment in October 1937 were somewhat higher than the average for all manufacturing industries combined and that the average even for section men during the first 6 months of 1938 was 40.6 cents. At the same time, it was stated that the most serious problem of many important groups of railroad workers is the irregular, casual, or seasonal nature of employment, resulting in extremely inadequate annual wages.¹² Many important groups of workers in virtually all industries have such limited employment that their problem, when viewed in terms of average weekly hours throughout the year, is a problem of excessively low average hours.

Growth of Interest in Wages and Living Standards

THE PROBLEM OF ANNUAL EARNINGS

The 1938 railroad wage controversy turned not so much on the general averages of hourly and monthly earnings as on the extremes of rates of pay and especially on the lower extremes of annual earnings. These, it was found, were often affected more significantly by irregular and part-time employment than by rates of pay. An unprecedented amount of information regarding annual earnings and the effects of inadequate employment on earnings was made available in 1938 by the Railroad Retirement Board under the provisions of the Railroad Retirement Act. This information was presented in the form of tabulations summarizing the earnings and months of service of individual employees, whereas previously available data consisted for the most part of monthly totals of wages paid and of numbers of persons employed.¹³

These tabulations show that the average annual compensation in 1937 of railroad employees who had any work during the year was only \$1,108; and that the average of those employees who were "attached" to the industry in the sense that they had some employ-

¹² Emergency Board appointed September 27, 1938, under sec. 10 of the Railway Labor Act. Report in re Atchison, Topeka & Santa Fe Ry. and other class I railroads and certain of their employees. Washington, 1938. See in particular pp. 34-37, 52.

¹³ U. S. Railroad Retirement Board. Railroad Wages and Months of Service, 1937. Washington, 1938. 3 vols.

ment in at least 6 months of the year was \$1,563. The irregularity of employment is partly reflected in the fact that only 52.6 percent of all employees had employment in each of the 12 months, and only 68.9 percent had employment during 6 months or more. The lower wage groups were as a rule the least regularly employed. The average annual compensation of those who had employment during each of the 12 months was \$1,779; of those who had employment in only 11 months, \$1,234; in only 10 months, \$1,023; in only 9 months, \$926; in only 8 months, \$724; in only 7 months, \$605; and in only 6 months, \$507. The proportion of employees receiving the lower annual earnings increased very rapidly as the irregularity of employment increased. This is indicated by the percentages of employees receiving, for example, less than \$1,000. Among those who had some employment in each of the 12 months, 14.6 percent received less than \$1,000; in the 11-months group, the number receiving less than \$1,000 formed 39.2 percent of that group; in the 10-months group, 54.3 percent; in the 9-months group, 62.3 percent; in the 8-months group, 78.6 percent; in the 7-months group, 87.8 percent; and in the 6-months group, 92.4 percent. Among all of those who had work in less than 6 months, only 760 individuals received \$1,000 or more.

The widespread interest in the problem of annual earnings and such related questions as a reduction of the rate of labor turn-over, a smoothing out of seasonal fluctuations, and vacations with pay has led to a number of special studies in these fields, especially by the United States Bureau of Labor Statistics. Although the plans actually in operation for stabilizing employment and assuring a minimum annual income are not numerous, a few experiments have recently been undertaken.¹⁴ The vast amount of casual labor and the need for labor mobility in an age of rapid change and readjustment raise problems beyond the scope of a single employer or even of an industry. It is nevertheless a fact of significance that there has been a wider recognition of the dependence of living standards on regularity of income and on aggregate annual income.

PUBLIC POLICIES

When the impact of depression thrust upon the Nation after 1929 the problem of handling over a long period an unprecedented amount of unemployment, the traditional individualism was modified by the necessity of using public funds for meeting at least the minimum living requirements of the unemployed. It was further modified by the choice of the alternative of using public funds for providing jobs instead of doles. The general works program was designed to pro-

¹⁴ See *Monthly Labor Review*, July 1938, pp. 52-59 (reprinted as Serial No. R. 778), and January 1939, pp. 66-67.

vide a minimum amount of work at prevailing rates of pay to avoid depressing the general wage levels and standards of living. The general works program and the special undertakings, such as the Civilian Conservation Corps and the National Youth Administration, were also designed, within the limits of noncompetitive employments, to aid in maintaining living standards by performing such needed tasks as the construction of schools, municipal utilities, roads, parks, and recreation centers. A recognition of these values was reflected in the expansion of the works program as a method of facing the sharp decline in employment early in 1938, while at the same time there was growing recognition of the need to provide additional safeguards against abuses in the use of works-program funds.

The years 1937 and 1938 were marked also by significant extensions of public policies that directly affect wages and hours. The most notable development in this field was the enactment of the Fair Labor Standards Act, which went into effect on October 24, 1938. This law was designed for the general purpose of maintaining "a ceiling for hours and a floor for wages." It was also designed to afford special protection for children.

Farm labor was not covered by the Fair Labor Standards Act and there has been little effort to regulate the wages, hours, and conditions of work of agricultural labor. The Sugar Act of 1937 did, however, require the payment of not less than prescribed rates of wages for sugar-beet labor as a condition of eligibility for benefit payments under the act. The minimum wage rates as determined for the 1938 crop of sugar beets varied in the 7 sugar-beet areas but provided for significant increases in rates in some of the areas.¹⁵

The general program of social insurance, adopted earlier, was developed administratively into a comprehensive national system and was subjected to its first severe test by the business recession of the latter part of 1937 and the early part of 1938. The effects of this program on wages and hours are restricted to the mitigation of unemployment and other social hazards, but it was the intent of the authors of the program that these cushioning processes should aid in maintaining the flow of income and of goods into consumption during recessions and also in maintaining the morale of wage-earning classes. Measurable success in these respects is widely recognized. In 1938, \$396,300,000 was paid as unemployment compensation in 31 States.

A public policy more directly concerned with wages and hours is embodied in the Public Contracts (Walsh-Healey) Act of July 30, 1936, prescribing labor conditions in establishments making goods under contract with the United States Government. Ten additional

¹⁵ Monthly Labor Review, February 1938, pp. 322-340: "Wages, Employment Conditions, and Welfare of Sugar-Beet Laborers," by Elizabeth S. Johnson; Monthly Labor Review, June 1938, p. 1419: "Minimum Wage for Sugar-Beet Labor, 1938."

minimum-wage determinations became effective in 1938. In some of these industries, marginal differentials were granted. The conditions fixed by the minimum-wage determinations included minimum hourly rates and minimum weekly earnings for a week of 40 hours.

In the field of railroad wages, an outstanding incident in public policy was the report of the Emergency Wage Board. In 1937 collective agreements with railroad employees provided for upward adjustments in wage rates. Later declines in business led railroad employers in May 1938 to serve notice of their intention to reduce rates of pay 15 percent on July 1, 1938. Prolonged negotiations, as well as efforts by the National Mediation Board, failed to settle the controversy, and on September 27 the President appointed an Emergency Wage Board under the authority of the Railway Labor Act. After extensive hearings the Board recommended that the proposed reduction be given up, and the employers accepted the decision. The problems confronting the railroads were the subject of special study by a committee of six, representing the employers and employees, appointed by the President on September 20. This committee reported on December 23, with recommendations for an extension of public authority to include the various phases of the national transportation system. The extension of public policy in relation to modes of transportation other than railroads was marked by an order of the Interstate Commerce Commission on July 12, 1938 (modified by an order of Jan. 27, 1939), for regulating the hours of work of bus and truck drivers engaged in the transportation of passengers or property in interstate or foreign commerce. This order was limited, however, to regulations for promoting safety.¹⁶

In many of the States, labor legislation in 1937 and 1938 dealt with wages and hours. Notable among these measures were several laws providing either for the initial adoption or for the renewal and strengthening of minimum-wage legislation. These measures were largely a result of the decision of the United States Supreme Court holding minimum-wage laws for women constitutional.

The growth of interest in the living standards of the Nation and especially of the low-income groups found expression in 1938 in proposals for significant extensions and improvements of the program relating to unemployment insurance and old-age pensions. The low-cost housing program was rapidly advanced. Proposals were made for a more extensive and systematic program for improving public health, hospitalization, and medical care. At a conference in July 1938, called by an Interdepartmental Committee to Coordinate Health and Welfare Activities, the discussion assumed the form of a tentative national program. At the Fifth Annual Conference on Labor Legislation at Washington in November, a movement gained

¹⁶ See *Monthly Labor Review*, September 1938, pp. 544-545.

impetus for the enactment of State laws designed in general to provide for intrastate industries and employments such safeguards relating to wages and hours as are embodied in the Federal Fair Labor Standards Act.¹⁷

PUBLIC INQUIRIES RELATING TO INCOME AND LIVING STANDARDS

Surveys of public health, hospitalization, and medical needs have included the relation of income to these problems.¹⁸ Extensive studies of family budgets and of income and expenditures had been under way before 1938 by the Bureau of Labor Statistics, the Bureau of Home Economics, and the Works Progress Administration. These were initiated in connection with the obtaining of current family budget data by the Bureau of Labor Statistics for revising its cost-of-living indexes and were expanded into a national survey of consumer incomes and expenditures. The analysis of the data, far more adequate than any previously available information, was undertaken by the National Resources Committee.¹⁹

The use of the data of the surveys for revision of the Bureau of Labor Statistics cost-of-living indexes was continued in 1938, with numerous extensions and applications relating to living costs and living standards in various localities.

It has long been recognized that in many countries cooperative enterprises, especially in the field of merchandising, have been effectively used for maintaining living standards. This result has been achieved mainly by downward pressure on prices and by insistence on adequate standards of quality. The recent increase of interest in the subject in the United States found expression in various ways, including studies by the United States Bureau of Labor Statistics.²⁰

It is apparent that neither wages nor hours nor any single aspect of the Nation's economy can properly be viewed in isolation except for limited descriptive or analytical purposes. There is evidence of an increasing recognition of this fact. Among the many indications of the shift of emphasis was the formation of the Temporary National Economic Committee, consisting of six members of the Senate and the House of Representatives and six representatives of executive agencies. This Committee, in some respects unprecedented in

¹⁷ Growth of interest in such legislation was revealed by a recent national survey of opinion by the American Institute of Public Opinion. The survey indicated that 71 percent of voters and 56 percent of employers favored the Fair Labor Standards Act (New York Times, January 1, 1939).

¹⁸ See for example, U. S. Public Health Service, *The Relief and Income Status of the Urban Population of the United States, 1935*, Washington, 1938. (Preliminary Reports, the National Health Survey, Population Series, Bulletin No. C.)

¹⁹ A volume on the income aspect of the survey (Consumer Incomes in the United States: Their Distribution in 1935-36) was published in August 1938 by the National Resources Committee.

²⁰ In addition to publishing numerous articles in the *Monthly Labor Review*, dealing with several aspects of the movement, the Bureau is publishing a bulletin (No. 659) on Consumers' Cooperation in the United States, 1936, by Florence E. Parker, giving the results of field surveys.

American history, initiated in 1938 an inquiry into the causes of the faulty functioning of the Nation's economic system. In the early hearings, there was special emphasis on the persistence, extent, and effects of unemployment and inadequate employment, not only of labor but also of productive resources generally. The effects, it was shown, are apparent chiefly in the substandard living conditions of many millions of the working population. The Committee will require much time for assembling and analyzing the relevant data for the purpose of proposing remedies. The early hearings nevertheless made apparent the necessity for increasing the production of needed goods and services. They also emphasized the intricate nature of the problem of wages arising from the fact that wages are both production costs and consumer income, the flow of domestic income having a particularly vital bearing on volume of production in a period of inelastic external markets and investment outlets.²¹

²¹ For a summary of the early work of the Committee, see *Monthly Labor Review*, January 1939, pp. 1-15, "Basic Problems of National Economy," by Edwin M. Martin.

LIVING COSTS IN 1938

By FAITH M. WILLIAMS, *Bureau of Labor Statistics*

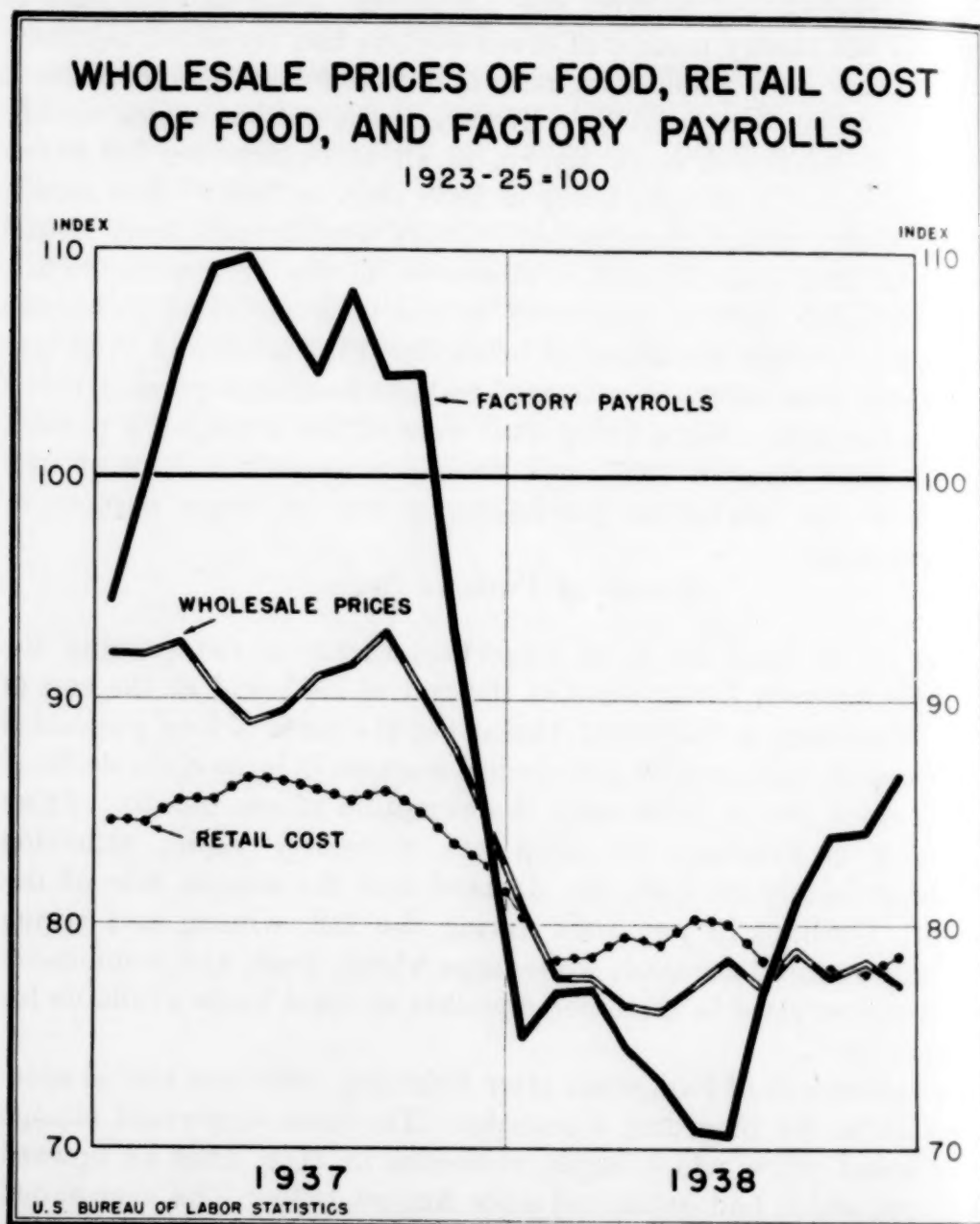
THE cost-of-living indexes prepared by the Bureau of Labor Statistics indicate that the cost of all goods purchased by wage earners and lower-salaried clerical workers was 1.6 percent lower in 1938 than in 1937. If the money income of these workers had remained the same in the 2 years, they would have been able to purchase a larger amount of goods and services in 1938. However, average per capita weekly earnings of employed wage earners in all manufacturing industries combined were 7.4 percent lower in 1938 than in 1937. As a result, the purchasing power of employed workers was actually lower by 5.9 percent in 1938 than in 1937. Moreover, in the 12 months ending with December 1938, employment in the manufacturing industries was on the average considerably below the 1937 level, and total pay rolls for the year 1938 are estimated to have been 24.0 percent below the total for 1937. Since living costs were on the average 1.6 percent lower in 1938 than in 1937, this decline represents a drop of 22.8 percent in the aggregate purchasing power of wage earners in manufacturing.

Trends of Various Items

Food prices were the most important factor in determining the difference between living costs at the end of 1937 and at the end of 1938. Beginning in May 1937, the cost of the kinds of food purchased by families of wage earners and clerical workers in large cities declined steadily until March 1938, with the exception of one month. From September to February the drop was extremely rapid, reflecting disturbing factors on both the demand and the supply side of the market. Declines in pay rolls during the fall, winter, and spring materially reduced demand, while large wheat, fruit, and commercial truck crops resulted in increased amounts of these foods available for domestic use.

The movement of food costs after February 1938 was not so spectacular as in the preceding 5 months. The most important change was in bread prices which began to decline in May, after an upward movement which had continued since August 1936. The year ended with the food-cost index within a fraction of a percent of the February level. After irregular increases from February to June, a new decline occurred which was again reversed in December when an unusually large seasonal advance appeared in butter prices, and 11 of the 13 fresh fruits and vegetables carried in the index rose in price. These increases were large enough to offset declines in the other group indexes included in the food-cost index in the last month of the year.

The interaction between the movement of pay rolls, wholesale prices of food, and food costs to families of wage earners and clerical workers is shown in the accompanying graph.¹ As the graph (see p. 643) shows, food prices are much more sensitive than other prices entering into the cost of living, and they responded immediately to the drop in demand occasioned by the falling off in pay rolls in 1937.



The Bureau's recent studies of family expenditures show that food costs are still the most important item in the budgets of the lower- and middle-income groups. Food purchases took from 28 to 39 percent of the average expenditures of employed wage earners and clerical

¹ The index of food prices at wholesale includes 144 different price series and is weighted according to quantities entering the country's wholesale markets; index of retail food costs includes 84 price series and is weighted according to family purchases of wage earners and clerical workers. The two indexes are therefore not strictly comparable, and are here presented solely to show trends.

workers in 42 large cities covered in a survey made in 1935-36. Next in importance to food comes housing, the proportion of total family expense going for this item varying from 12 to 21 percent. The percentage was higher in the Northeast where rents as such are affected by density of population in the metropolitan areas which characterize this region, and where heat is frequently paid for with rent in such a way as to make it impossible to separate one from the other.

Rental costs rose by a fraction of a point during 1938. In 15 of the 32 cities covered by the Bureau of Labor Statistics' rent index, there were increases ranging from 0.2 in Baltimore to 4.6 percent in Chicago. In 16 cities there were slight declines. From the low of 62.6 in March 1935 (as compared with 100.0 in 1923-25), the rent index for 32 cities combined rose to 69.3 in December 1937 and stood at 69.6 at the end of 1938.

Clothing costs appear to be slightly less important to the wage earner and clerical group than they were at the end of the World War, but they still take about 10 percent of the expenditures of the average urban family. As contrasted with very consistent increases from July 1935 to September 1937, the index of clothing costs declined in each quarter of 1938. The drop from December 1937 to March 1938 amounted to 1.4 percent and was relatively twice as great as that which occurred between the spring, summer, and fall quarters. The decline in prices of clothing at wholesale, including shoes and other items, which began in April 1937, leveled out or was reversed after July 1938. Neither of these changes in prices at wholesale had had enough effect upon prices in retail stores in December to prevent the further decline of the Bureau's index of clothing costs in 32 cities combined.

Fuel and light costs moved irregularly during the year, with the usual seasonal drop in the spring and increase in the fall and winter. At the year's end the index for this group stood at 88.0 percent as compared with 100.0 for average costs in 1923-25, and 87.3 percent at the end of 1937. In 10 of the 51 cities in which the Bureau obtains electric light and power rates, costs were lower in December 1938 than in December 1937 for families using 25 and 40 kilowatt hours per month. Most families in the wage earner and lower-salaried groups buy electric service at these levels. The relatively small proportion which have electric refrigerators and thus consume more power were benefited by reductions in three additional cities (Washington, Rochester, and Milwaukee).

The adjustment of prices of furniture and furnishings to the decline in demand which began early last fall was marked. The drop in retail costs from December to March was very sharp, with smaller declines in the three succeeding quarters as retail sales increased again.

The cost of the goods and services combined in the index for miscellaneous items is more stable than that of any other group in the cost-of-living index. Rates for laundry, telephone, and medical service change very slowly, and so do newspaper prices and admissions to motion-picture theaters. Using average costs in 1923-25 as a base, this index stood at 98.6 in December 1937, and 98.5 in December 1938.

Changes in Cost of Typical Budgets

Perhaps the best way of summarizing what these changes in living costs mean to urban wage earners in large cities is to consider the cost of a maintenance budget for a family of four in connection with the distribution of such workers according to income.

In March 1935 the Division of Social Research of the Works Progress Administration conducted a study of comparative living costs in 59 cities. The purpose of that study was to determine the cost of a uniform level of living in a large number of places at the same time, and how these costs compared from one city to another. Quantity budgets were constructed by the Works Progress Administration to represent the needs of families at two levels of living—the basic maintenance level, and an emergency level. An identical budget for each of these levels of living, with certain adjustments in the fuel, ice, and transportation lists to take account of climatic and other local conditions, was used in each of the cities. The Bureau of Labor Statistics cooperated by obtaining the prices necessary to compute the costs of these budgets. Insofar as possible, prices for identical commodities were obtained in each city.¹

The Works Progress Administration points out, regarding the budgets used, that "the maintenance budget is not so liberal as that for a 'health and decency' level which the skilled worker may hope to obtain, but it affords more than a 'minimum of subsistence' living."

Estimates of the cost of these budgets at later dates may be made for the 31 cities covered by both the Works Progress Administration's study and the Bureau of Labor Statistics' studies of changes in the cost of goods purchased by wage earners and lower-salaried workers by applying the Bureau's indexes of living costs (which show changes in costs from time to time) to the WPA data on intercity differences in costs in March 1935.² The following table shows the results of combining the two sets of figures.

¹ Details of this study and a description of the goods and services included in these budgets are given in Research Monograph XII (Intercity Differences in Costs of Living in March 1935, 59 Cities) of the Division of Social Research, Works Progress Administration, Washington, D. C.

² As the cost-of-living indexes of the Bureau of Labor Statistics are based on a budget weighted differently from the budget used in the Works Progress Administration study, when the two sets of figures are combined the resulting estimates of intercity differences in costs are merely approximations.

TABLE 1.—*Estimated Cost of Living for a 4-Person Manual Worker's Family at Maintenance Level¹ in 31 Large Cities, as of Dec. 15, 1938²*

City	Total	Food	Clothing	Housing	Fuel and light	Furniture, furnishings, household equipment	Miscellaneous
Atlanta.....	\$1,307.48	\$441.29	\$152.02	\$286.90	\$63.89	\$33.37	\$330.01
Baltimore.....	1,334.59	459.99	152.57	247.85	70.86	33.22	370.10
Birmingham.....	1,227.63	429.08	155.27	226.42	57.53	31.06	328.27
Boston.....	1,340.94	455.75	167.75	260.19	89.03	34.42	333.80
Buffalo.....	1,303.01	439.01	171.62	241.12	76.78	35.28	339.20
Chicago.....	1,413.53	445.34	172.20	292.61	98.77	32.68	371.93
Cincinnati.....	1,322.50	422.71	167.46	272.57	56.44	35.88	367.44
Cleveland.....	1,428.35	452.70	194.40	284.52	71.13	34.39	391.21
Denver.....	1,274.21	419.02	162.26	237.25	70.07	34.14	351.47
Detroit.....	1,423.85	432.45	180.28	310.41	85.18	33.73	381.80
Houston.....	1,254.61	432.34	163.85	244.13	43.77	36.07	334.45
Indianapolis.....	1,244.32	422.12	160.86	238.16	68.34	32.55	322.29
Jacksonville.....	1,249.13	473.93	155.52	218.48	75.07	33.36	292.77
Kansas City.....	1,266.20	438.92	169.29	209.84	64.05	30.44	353.66
Los Angeles.....	1,366.90	425.65	191.26	246.91	60.15	36.29	406.64
Memphis.....	1,245.26	408.94	154.49	262.50	57.65	34.52	327.16
Minneapolis.....	1,438.97	432.97	180.93	303.67	124.22	35.33	361.85
Mobile.....	1,129.91	423.22	146.12	175.30	58.95	33.96	292.36
New Orleans.....	1,254.86	429.21	159.94	204.09	55.41	33.62	372.59
New York.....	1,393.67	483.02	149.30	308.54	83.90	29.79	339.12
Norfolk.....	1,250.95	437.96	159.02	245.78	74.29	31.57	302.33
Philadelphia.....	1,321.21	437.38	161.68	254.57	72.05	31.96	363.57
Pittsburgh.....	1,362.58	447.13	169.14	284.91	56.46	32.74	372.20
Portland, Maine.....	1,263.31	447.42	176.20	201.11	93.32	33.99	311.27
Portland, Oreg.....	1,293.43	447.78	187.46	192.66	69.40	33.97	362.16
Richmond.....	1,274.95	423.41	180.03	251.90	74.44	35.61	309.56
St. Louis.....	1,363.23	443.99	163.46	285.15	56.23	31.88	382.52
San Francisco.....	1,440.79	447.33	194.00	284.42	63.83	37.13	414.08
Scranton.....	1,296.64	443.26	169.71	267.88	64.79	32.68	318.32
Seattle.....	1,296.20	435.28	181.32	196.31	77.17	34.86	371.26
Washington, D. C.....	1,435.53	462.31	167.63	353.29	74.64	34.33	343.33

¹ As defined by the Works Progress Administration.² Computed by applying, by groups of items, the Bureau of Labor Statistics' indexes of the cost of goods purchased by wage earners and lower-salaried workers, which show changes in costs from time to time in each of the cities, to the data on differences in costs from city to city, presented by the Works Progress Administration in its publication, *Intercity Differences in Cost of Living in March 1935, 59 Cities*, Research Monograph XII.

In March 1935, the cost of this budget in 59 cities varied from \$1,414.54 in Washington, D. C., to \$1,129.81 in Mobile, Ala. The average cost was \$1,260.62. In December 1938, when costs in the 31 cities have been estimated by combining the WPA budget and the Bureau's cost-of-living indexes, the city with the highest cost for the maintenance budget (\$1,440.79) was San Francisco and that with the lowest cost (\$1,129.91) was Mobile. The average cost for the 31 cities was \$1,316.73, as compared with \$1,282.97 for the same cities in March 1935.

Income Levels of Nonrelief Urban Families

The study of consumer purchases recently made by the Bureau of Labor Statistics covered 11 of the cities included in the Works Progress Administration's cost-of-living study. The percentage of families of employed wage earners, having received no relief during

the year 1935-36, whose incomes fell below the cost of the maintenance budget is shown in the following statement:

Metropolises:	Percent
New York (white)-----	19.9
New York (Negro)-----	51.7
Chicago (white)-----	30.2
Large cities:	
Providence, R. I. (white)-----	34.6
Columbus, Ohio (white)-----	23.6
Columbus, Ohio (Negro)-----	63.3
Atlanta, Ga. (white)-----	26.4
Atlanta, Ga. (Negro)-----	84.2
Omaha, Nebr. (white)-----	28.2
Denver, Colo. (white)-----	29.7
Portland, Oreg. (white)-----	29.4
Middle-sized cities:	
Columbia, S. C. (white)-----	22.0
Columbia, S. C. (Negro)-----	88.5
Mobile, Ala. (white)-----	32.7
Mobile, Ala. (Negro)-----	90.1
Butte, Mont. (white)-----	21.0

An estimated distribution of the families of wage earners in cities and nonfarm rural communities in 1935-36³ has recently been made by the National Resources Committee on the basis of the data collected by the Bureau of Labor Statistics and the Bureau of Home Economics in the study of consumer purchases.³ The distribution for metropolises and large and middle-sized cities, based on data collected by the Bureau of Labor Statistics, is presented on a percentage basis in the following table. It shows 36.8 percent of the wage earners' families in metropolises, 47.6 percent in large cities, and 56.2 percent in middle-sized cities with incomes under \$1,250 in 1935-36. This estimate excludes entirely families that received relief (either direct or work relief) at any time during the year. At the lowest income levels the families of wage earners not having received relief at any time during the year were smaller than the family provided for in the Works Progress Administration budget just quoted. Since relief is allowed in relation to need, the larger families received relief when their incomes dropped to a point which was still treated as sufficient to support a family of two or three persons. In all cities covered in the Consumer Purchases Study the average size of wage-earner families having received relief was larger than the average size of family among nonrelief wage earners. The large proportion of families with incomes below the average cost of this budget serves to emphasize the importance to the urban wage-earner group of the increases in real income which come with declines in living costs, provided money incomes remain the same.

³ National Resources Committee. *Consumer Incomes in the United States*. Washington 1938.

TABLE 2.—Percentage Distribution of Nonrelief Wage-Earning Families in Metropolitan Areas and Large Cities, by Income Level, 1935-36 ¹

Income level	Families living in—		
	Metropolises (1,500,000 population and over)	Large cities (100,000 to 1,500,000 population)	Middle-sized cities (25,000 to 100,000 population)
Under \$250.....	1.0	1.9	2.4
\$250 to \$500.....	3.0	5.5	6.3
\$500 to \$750.....	6.2	10.1	12.5
\$750 to \$1,000.....	11.5	14.7	17.8
\$1,000 to \$1,250.....	14.1	15.4	17.2
\$1,250 to \$1,500.....	14.4	12.8	13.0
\$1,500 to \$1,750.....	12.5	11.0	10.0
\$1,750 to \$2,000.....	10.3	9.2	7.5
\$2,000 to \$2,250.....	7.1	5.9	4.8
\$2,250 to \$2,500.....	5.2	4.0	3.1
\$2,500 to \$3,000.....	7.7	5.1	3.0
\$3,000 to \$3,500.....	3.5	2.2	1.2
\$3,500 to \$4,000.....	1.8	1.2	.5
\$4,000 to \$4,500.....	.8	.5	.3
\$4,500 to \$5,000.....	.4	.2	.2
\$5,000 and over.....	.5	.3	.2
All levels.....	100.0	100.0	100.0

¹ Based on report of the National Resources Committee, Washington, 1938: Consumer Incomes in the United States (p. 97). At the lowest income levels in these cities, families having received no relief during the year were unable to live on their incomes. They either drew on reserves accumulated in the past or secured credit.

Social Security

RECENT CHANGES IN DISMISSAL-COMPENSATION PLANS

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AS SHOWN by an earlier study, more than 200 American firms paid dismissal compensation during the period 1928 to 1933 to assist employees who were permanently laid off primarily because of technological changes or depression conditions.¹ Data recently obtained indicate that with improved business in most industries, the need for dismissal compensation decreased and the number of new plans declined. A few large firms, however, adopted formal dismissal policies to replace their informal plans. The dismissal-compensation movement received considerable impetus from the publicity given to the joint union-railroad agreement of May 21, 1936, providing several types of compensation for employees adversely affected by the consolidation of the facilities of two or more carriers.² With the passage of the Social Security Act in 1935 and the adoption of unemployment-compensation laws in all 48 States, the District of Columbia, Alaska, and Hawaii, employers have had to reconsider their own plans to combat economic insecurity. A large number of companies have revised their retirement systems, to supplement annuities payable under title II of the Social Security Act. Many of the company unemployment-benefit and guaranteed-employment plans have been modified or abandoned.³ Although the various unemployment-insurance laws do not specifically provide for dismissal compensation,⁴ except as they include permanent lay-offs, a similar process of adaptation has been taking place in many dismissal-compensation plans. Such policies still form a part of the industrial-relations programs of several hundred American companies.

¹ See *Monthly Labor Review*, November 1934, pp. 1067-1077: "Dismissal Compensation in American Industry."

² See *Monthly Labor Review*, June 1936, pp. 1503-1505: "Dismissal Compensation for Railway Employees. Displaced by Railroad Consolidations." Similarly the payments to displaced ferryboatmen in San Francisco Bay received considerable attention (*Idem*, October 1936, pp. 867-869: "Dismissal Compensation for San Francisco Ferrymen").

³ *Monthly Labor Review*, October 1937, pp. 839-842: "Unemployment-Benefit Plans in 1937"; and July 1938, pp. 52-59: "Annual Wage and Guaranteed-Employment Plans."

⁴ The Massachusetts and Rhode Island laws allow lump-sum payments instead of periodic unemployment benefits in certain special cases.

No single trend can be found in dismissal-compensation experience from 1935 through 1938, because of marked differences in such policies prior to 1935. Plans had ranged from those making small "notice" payments of 1 or 2 weeks' wages to those granting allowances of 1 or 2 years' pay; from informal plans in which each individual was considered separately to those with definite eligibility rules and scales of compensation; and from those which included only employees laid off for a particular reason (such as the closing of a plant) to those compensating all employees permanently laid off. In addition, company practice varied because unemployment-insurance benefits were payable by the end of 1938 in only 31 States, and because in all but 8 States dismissal notice or compensation postpones the payment of insurance benefits. Thirty-two State unemployment insurance laws, following "The Draft Bill," hold that a worker is disqualified for unemployment benefits in any week that wages are paid in lieu of notice. If such payment is less than the unemployment benefits, benefits are payable but reduced thereby.⁵ Eleven additional States also include, as disqualifications, compensation for wage loss or dismissal allowances.⁶ Only 8 States (Alabama, California, District of Columbia, Louisiana, Mississippi, New York, Pennsylvania, and Wisconsin) have no such provision.⁷ Although over half of the firms reported they have not altered their dismissal-compensation policy, the fact remains that important changes have been made and a considerable number of companies are contemplating some modification of their dismissal program.⁸

From the present study, the following conclusions may be drawn: (1) A few companies have protected the waiting period at the expense of larger dismissal payments; and (2) a larger number of firms have reduced their scales of dismissal compensation for certain groups of employees, but have planned to assist (a) those not covered by the Social Security Act, (b) those with long service, or (c) those whose previous salaries made unemployment-insurance payments seem inadequate. Every indication points to the continuation of dismissal payments by American firms in particular instances as supplements to unemployment-insurance benefits.

⁵ West Virginia does not provide partial unemployment benefits if wages in lieu of notice are less than the benefits.

⁶ Connecticut and Montana do not provide for such reduced unemployment benefits. In Missouri, the weeks of wages in lieu of notice or compensation for wage loss are deducted from the benefit period as if the unemployment insurance had been paid.

⁷ For a summary of these provisions see pp. 82-85 of the Social Security Board's report: *Comparison of State Unemployment Compensation Laws*, August 1, 1938. In addition, the Bureau of Internal Revenue has ruled that dismissal wages are "wages" and subject to both the unemployment and old-age-insurance taxes (Regulations 90 and 91; see also 53 S. S. T. 54; 125 S. S. T. 123; 318 S. S. T. 235.)

⁸ The National Industrial Conference Board in its report, "Dismissal Compensation," in September 1937 (pp. 14, 15) found less actual and contemplated change than that reported in the present author's survey made over a year later. For a summary of the Conference Board report, see *Monthly Labor Review*, December 1937, pp. 1355-1360.

Scope of Survey

This study is based on returns from 88 out of 105 companies which were addressed by mail on November 14, 1938. The firms selected were known by the author to have had considerable experience with dismissal compensation. An attempt was made to include various types of manufacturing concerns, oil refineries, banks, stores, and public utilities scattered throughout the United States. Obviously the more industrialized States of Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Ohio, Indiana, Michigan, Illinois, Wisconsin, Missouri, and California have greater representation in the sample than others, although several of the companies questioned operate in all, or most, of the States of the Union. The 88 firms employ over a million and a half workers, indicating that the group includes a number of very large employers. In fact, only 5 companies have fewer than 1,000 workers, but 40 have 5,000 or more. Any conclusions drawn from this summary must take into account these characteristics of the sample.

Plans With No Changes

Table 1 summarizes the number of changes since 1935 in the dismissal-compensation policies of the 88 firms. Eighteen companies reported no change had been made and none was contemplated at the time of reporting. A midwestern company explained:

The adoption and operation of unemployment insurance by the various States will, we believe, have no effect upon our policy and practice relating to dismissal compensation * * * for the reason that we pay a dismissal wage or compensation only to those employees who are permanently dismissed because they have not proven entirely suited to the job; whereas no dismissal wage is paid by us to employees merely laid off on account of lack of work and whom we will willingly reemploy, when conditions warrant. Therefore * * * the existence of the unemployment insurance laws should have no effect upon our dismissal-wage procedure.

TABLE 1.—Changes Made or Planned in Dismissal-Compensation Policy of 88 Firms. Classified by Type of Business, 1935-38

Policy	Number of firms, by type of business						
	Total	Manu- fac- turing	Oil re- fining	Public utility	Mer- can- tile	Bank- ing	Miscel- laneous
Total	88	38	8	15	16	8	3
No change made and none contemplated	18	9		3	3	3	
No change made	26	9	1	5	6	4	1
No change made, but change contemplated	15	6	1	4	3	1	
Change made, but no relation to Social Security Act	11	2	3	3	2		1
Change made related to Social Security Act	15	10	3		2		
Plan discontinued	3	2					1

Twenty-six companies did not comment on the future, but replied that they had not changed their policies. Several reasons were offered for continuing their present plans. A public utility stated, "At various times when lay-offs were necessary, we have fairly regularly given one-half week's pay for each year's service, with a minimum of 2 weeks. We have had very few instances of this kind since 1935 and so will definitely say that the passage of the social-security laws has had no effect on our plans for dismissal compensation." Several companies with informal plans replied in the following vein: "This company has no generally defined policy in regard to dismissal wages. We have, however, paid dismissal wages to a number of employees, but each case is decided on its merits; therefore, no changes have been made in our policy since the beginning of social-security legislation." One Massachusetts manufacturing firm continues its practice of paying 1 week's wages at dismissal, although "this prolongs the waiting period 1 week but gives the man 1 more week's compensation, unless he finds a job within the stipulated period." The eight banks which replied are all members of the Federal Reserve System and so are not covered by the Social Security Act. One eastern bank, however, stated, "We look forward to being included under the act by Congressional amendment in the coming session. I see no reason, however, why this should change our policy." Besides banks which are excluded from such legislation, it is probably fair to conclude that a number of companies have not modified their dismissal-compensation plans because (1) they differed from unemployment-insurance benefits, (2) they were informal, (3) they were seldom used, or (4) they paid very small sums in lieu of notice.

Plans With Contemplated Changes

Fifteen companies have kept their old dismissal policies, but have contemplated, or are engaged in making, some modification. A large chemical firm intends "making some changes as soon as practicable. We have not yet made these changes because of the fact that substantial numbers of our employees are located in States in which unemployment-insurance benefits are not yet available." Four firms replied that they were in the process of revising their dismissal-compensation plans in the light of the social-security legislation. Two others answered that they might "make an adjustment * * * in consideration of unemployment insurance, but have so far not seen fit to do so." One large company considered an increase in its scale of dismissal payments, but decided not to liberalize its allowances because of unemployment insurance.

Plans With Actual Changes

Of the 29 company plans which were definitely modified from 1935 to 1938, 11 were reported as not caused by the Social Security Act, 15 were related to that legislation, and 3 were discontinued entirely. One of the discontinued plans was given up for financial reasons, another had been adopted only for an emergency situation, and the third one (with relatively small payments) was terminated because of the public system of unemployment benefits.

The following explanations were given by the 11 companies which adopted new plans for reasons other than the Social Security Act: 6 formalized their policies, 2 raised their scale of benefits because of improved business conditions, 1 increased compensation because of a merger, 1 reduced benefits because of a new public contract, and 1 signed a collective agreement with a trade-union, covering dismissal procedure.

The scale of dismissal compensation (table 2) adopted by a large food company in 1938, and similar to one used by an oil company, is notable because it varies allowances with the wages, age, and service of the dismissed employee. Like many other highly developed policies, the compensation is increased more rapidly for those with longer service. The plan defines clearly the cases for which compensation is and is not paid, the method of computing average earnings, attained age, and length of service, the procedure in case of reemployment, the notice to be given, and the approval to be secured from company officials before making any payments. The allowances are to be paid in a lump sum on the date of termination, with periodic payments only in exceptional cases which have secured executive approval.

TABLE 2.—Schedule of Termination Allowances Adopted by a Food Manufacturing Company in 1938

[Maximum=52 weeks]

Age at termination	Number of weeks' earnings to be paid as termination allowance after specified years of continuous service ¹																																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
63 and over.....	2	3	5	6	8	9	11	12	14	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	33	36	39	42	45	48	51	52	52	52	52	
60 to 62.....	2	3	5	6	8	9	11	12	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	32	35	38	41	44	47	50	52	52	52	52	
57 to 59.....	1	2	3	4	5	6	8	10	12	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	31	34	37	40	43	46	49	52	52	52	52	
54 to 56.....	1	2	3	4	5	6	7	9	11	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	30	33	36	39	42	45	48	51	52	52	52	
51 to 53.....	1	2	3	4	5	6	7	8	10	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	29	32	35	38	41	44	47	50	52	52	52	
48 to 50.....	1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	28	31	34	37	40	43	46	49	52	52	52	
45 to 47.....	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	27	30	33	36	39	42	45	48	51	52	52	
42 to 44.....	(2)	(2)	(2)	(2)	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	26	29	32	35	38	41	44	47				
39 to 41.....					4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	26	29	32	35	38	41	44	47				
36 to 38.....					3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	25	28	31	34	37							
33 to 35.....					3	4	4	5	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19													
30 to 32.....					2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15																
27 to 29.....					2	2	3	3	3	4	5	6	7	8	9	10	11																			
26 and under..					2	2	2	2	2	3	4	5	6	7																						

¹ To be granted in addition to notice of 1 week after $\frac{1}{4}$ year of service, 2 weeks after 5 or more years of service; and in addition to any vacation pay due. A similar schedule is used by an oil company.

² Notice or pay in lieu thereof.

Even among the 15 companies with plans in which changes were made which were related to the Social Security Act, the systems vary considerably. Three oil companies with highly developed plans have deducted unemployment insurance from the amount of dismissal compensation granted. One of these firms, however, declared, "We are still in some doubt as to the merits of deducting for amounts payable under the law * * * and we may ultimately make another change which may eliminate the 'law' deduction and make the over-all program applicable only to employees with, say 10 or more years of service, rather than 5 years as at the present time." A fourth company provided in its 1938 formal plan that the firm might deduct unemployment benefits, but "we have acted upon several cases since the adoption of the plan and in none have we made any deductions for unemployment insurance."

Two firms have adopted new plans applicable only to those not eligible for unemployment insurance. As a result of financial conditions, one firm has given up its plan for short-service workers, but still pays compensation to long-service employees on an individual basis because "the social-security laws have not been in effect long enough to erase our obligation to superannuated employees." Another company cut its notice or pay in lieu of notice for factory workers, but kept the larger payments for those with some years of service. On the other hand, a department store has not reduced dismissal compensation for those entitled to 2 or 3 weeks' compensation because it felt that "a majority of people are not budgeted to cover this gap" after dismissal before unemployment-insurance payments begin. It has lowered allowances in the higher brackets because of the unemployment-insurance benefits. A paper-manufacturing company reduced its formula used to determine compensation by approximately 25 percent.

Two companies have tried to link their dismissal payments to the terms of the particular State statute. One of these, a large department store, adopted on January 1, 1939, a plan to make full payments during the 3 weeks' waiting period of the State law, followed by half pay (or more for those receiving over \$30 a week) for the 16 weeks covered by law, and then an additional week's pay for each added year of service (table 3).

TABLE 3.—*Old and New Schedules of Dismissal Compensation of a Department Store, to Complement the New York State Unemployment Insurance Law*

Length of service	Old schedule, full pay	New schedule		
		Full pay	Half pay ¹	Full pay
1 year.....	4 days.....	3 days.....	.....
18 months.....	6 days.....	6 days.....	.....
2 years.....	10 days.....	9 days.....	.....
3 years.....	2 weeks.....	2 weeks.....	.....
4 years.....	3 weeks.....	3 weeks.....	.....
5 years.....	4 weeks.....	3 weeks.....	2 weeks.....	
6 years.....	5 weeks.....	3 weeks.....	3 weeks.....	
7 years.....	5 weeks.....	3 weeks.....	4 weeks.....	
8 years.....	6 weeks.....	3 weeks.....	5 weeks.....	
9 years.....	7 weeks.....	3 weeks.....	6 weeks.....	
10 years.....	8 weeks.....	3 weeks.....	7 weeks.....	
11-19 years.....	.....	3 weeks.....	8-16 weeks.....	
20 years.....	.....	3 weeks.....	16 weeks.....	1 week.
Over 20 years.....	.....	3 weeks.....	16 weeks.....	1 week, plus 1 week for each additional year of service.

¹ Employees whose salary is more than \$30 a week are to be paid during this period the difference between \$15 and their weekly salary. Payment is to be made either in a lump sum or weekly, depending on the circumstances in each case. If the latter, weekly checks are to be mailed directly to the individual's home.

WORK OF SOCIAL SECURITY BOARD, 1937-38

MORE than 2¼ million persons were receiving benefits, under the social security system, for old age, blindness, and child dependency, at the end of the fiscal year 1937-38. The annual report of the Social Security Board ¹ indicates that a total of nearly \$454,000,000 was spent for these benefits during the year, of which the Federal Government contributed about \$210,000,000. In addition some 17,760,000 persons received benefits for total or partial unemployment, in a total amount of nearly \$180,000,000. Under the system of old-age insurance, in which the States do not participate, about 170,000 persons received lump-sum payments aggregating \$5,915,000.

The Board's report pointed out a marked development in both the extent and effectiveness of the program and noted that 1937-38 saw the first operations, on any considerable scale, of unemployment compensation and old-age insurance. It also emphasized the importance of the whole social security system as a "cushion" against such adverse conditions as were encountered during the recent business recession.

The following statement gives summary data regarding unemployment compensation and old-age insurance.

Old-age insurance:

Number of account numbers issued to June 30, 1938.....	39, 565, 157
Lump-sum claims certified through 1937-38:	
Number.....	169, 622
Amount.....	\$5, 915, 367
Average per claim.....	\$34. 87
Old-age reserve account June 30, 1938.....	\$1, 930, 620

¹ Social Security Board. Third annual report, 1938. Washington, 1938.

Unemployment compensation:

Estimated number of subject employers.....	668, 166
Estimated number of workers with wage credits.....	27, 602, 000
Benefit payments issued, January-June 1938:	
Number.....	17, 768, 275
Amount.....	\$179, 508, 721
Average payment.....	\$9. 61
Trust fund, June 30, 1938.....	\$881, 868, 479

The number of beneficiaries on the roll June 30, 1938, and the obligations incurred for each type of benefit are given in the following table.

Number of Beneficiaries, Amount of Benefits, and Federal Contributions, 1936-37 and 1937-38, by Type of Benefit

Kind of benefit	Number on roll, June 30, 1938	Total obligations incurred ¹		Average monthly payment	Federal contributions ²	
		1936-37	1937-38		1936-37	1937-38
All benefits.....	2, 308, 474	\$292, 959, 938	\$453, 872, 856	-----	\$146, 114, 210	\$209, 446, 840
Old-age assistance.....	1, 665, 402	243, 219, 000	361, 570, 000	\$18. 01	127, 634, 064	179, 180, 473
Aid to dependent children.....	604, 160	40, 760, 000	80, 926, 000	23. 33	13, 900, 596	25, 098, 532
Aid to blind.....	38, 912	8, 980, 938	11, 376, 856	20. 19	4, 579, 550	5, 167, 835

¹ Reported by State agencies.

² Included in "total obligations."

GRANTS FOR OLD-AGE ASSISTANCE

AMONG 585,877 persons accepted for old-age assistance during the period July 1937-June 1938 the average allowance per month was \$19.48 and the median allowance was \$18. In the various States the median allowance ranged from \$5 in Mississippi to \$38 in Colorado. These facts were disclosed by an analysis made by the Social Security Board, the results of which were published in the Social Security Bulletin for November 1938.

The report explains that the determination of amount granted varies in the different States. "It is usually intended to represent the amount needed to meet the standard which the State is willing to support as a reasonable basis for public assistance." Frequently the amount is determined on the budget-deficit principle: The needs of the individual are computed from a standard budget covering food, rent, clothing, etc.; the budget is adjusted to take account of any resources the applicant may have; and the remainder represents the budget deficit. The amount of grant, however, does not always equal the amount of budget deficit, even in States using this method. The amount actually granted may be reduced because of the maximum set in the State law or because of shortage of funds. Some States

tend to make flat grants, with deductions taking into account the individual's private income.

It is pointed out that "the amount of grant does not necessarily and in fact usually does not represent the total amount of income of a recipient of old-age assistance."

About 12 percent of the 585,877 monthly grants initially approved during the period covered were for amounts under \$10; 23.3 percent were from \$10 to \$14.99; 21.8 percent from \$15 to \$19.99; 18.4 percent from \$20 to \$24.99; and 10.7 percent were from \$25 to \$29.99. There were 14.3 percent that were for \$30 or more.

The distribution of initial grants made to those accepted for assistance during the year period, by States, is shown in the following table. The median grant in each State is also given.

Distribution of Initial Grants to Old-Age Assistance Recipients, July 1937-June 1938, by Amount and State, and Median Grants

State	Number of recipients	Percent of recipients with initial grants, per month, of—									Median grant
		Under \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	\$20.00 to \$24.99	\$25.00 to \$29.99	\$30.00 to \$34.99	\$35.00 to \$39.99	\$40.00 and over	
United States ¹	585,877	0.8	10.7	23.3	21.8	18.4	10.7	7.1	1.3	5.9	\$18
Alabama.....	6,470	2.3	28.5	33.3	16.5	10.0	4.3	5.1	(²)	-----	12
Arizona.....	6,540	.2	.8	2.3	11.4	25.5	28.3	31.5	-----	-----	26
Arkansas.....	6,966	.7	65.0	34.3	-----	-----	-----	-----	-----	-----	8
California.....	47,954	.4	2.8	3.2	5.9	9.5	11.8	5.2	5.0	56.2	35
Colorado.....	11,833	(²)	.4	1.1	2.8	5.7	7.7	8.4	6.6	67.3	38
Connecticut.....	2,797	-----	2.4	2.2	13.3	17.4	24.9	39.8	-----	-----	26
Delaware.....	147	-----	33.4	42.9	19.7	2.0	2.0	-----	-----	-----	10
Florida.....	21,082	-----	11.4	40.8	30.4	12.3	4.0	1.1	-----	-----	14
Georgia.....	36,700	4.8	58.7	24.8	7.2	2.6	.9	1.0	-----	-----	8
Idaho.....	1,546	.2	1.8	13.2	30.1	26.8	12.7	15.2	-----	-----	20
Illinois.....	25,133	-----	4.4	20.9	28.9	21.7	17.4	6.7	-----	-----	19
Indiana.....	9,166	.6	8.8	36.3	31.3	16.1	5.0	1.9	-----	-----	15
Iowa.....	14,316	2.1	7.0	13.5	24.6	47.3	5.5	-----	-----	-----	20
Kansas.....	21,516	.5	12.8	27.5	25.0	16.4	10.1	4.1	1.9	1.7	16
Kentucky.....	5,757	-----	47.3	48.3	4.4	-----	-----	-----	-----	-----	10
Louisiana.....	8,479	5.8	46.4	34.0	8.4	3.7	.9	.6	.1	.1	9
Maine.....	10,356	.1	2.4	13.9	30.6	23.2	15.3	14.5	-----	-----	20
Maryland.....	4,952	.6	10.2	28.9	20.9	27.1	5.7	6.6	-----	-----	16
Massachusetts.....	19,550	-----	.5	2.7	6.7	19.5	19.0	41.5	6.4	3.7	30
Michigan.....	41,323	.5	3.4	23.8	32.3	24.0	10.4	5.6	-----	-----	18
Minnesota.....	8,855	.2	4.3	12.9	34.3	28.1	15.5	4.7	-----	-----	19
Mississippi.....	1,992	33.9	60.1	5.5	.5	-----	-----	-----	-----	-----	5
Missouri.....	29,012	.1	8.5	37.2	33.5	14.4	4.9	1.4	-----	-----	15
Montana.....	3,216	-----	2.3	20.5	34.8	25.4	10.8	6.2	-----	-----	18
Nebraska.....	3,510	-----	10.5	40.6	31.3	12.8	3.9	.9	-----	-----	14
Nevada.....	2,145	(²)	.2	2.4	4.3	12.2	13.9	67.0	-----	-----	30
New Hampshire.....	987	-----	1.8	11.3	21.1	24.3	16.5	25.0	-----	-----	22
New Jersey.....	6,928	(²)	2.4	22.1	33.5	31.4	8.9	1.7	-----	-----	18
New Mexico.....	1,002	.3	32.6	31.8	16.7	9.1	5.1	2.6	.9	.9	12
New York.....	23,423	.1	1.4	17.6	22.2	23.1	17.8	3.3	7.4	7.1	21
North Carolina.....	33,060	2.0	59.6	28.1	7.4	2.1	.4	.4	-----	-----	8
North Dakota.....	1,486	.1	6.4	28.3	32.8	20.5	8.0	3.9	-----	-----	16
Ohio.....	19,020	.1	1.4	7.2	32.3	33.7	19.8	5.5	-----	-----	20
Oklahoma.....	7,432	.9	10.2	43.9	18.7	15.9	6.4	4.0	-----	-----	14
Oregon.....	7,169	(²)	2.3	18.7	25.4	24.6	14.7	14.3	-----	-----	20

¹ Distribution of total was adjusted for disproportionate representation of States.

² Less than 1/10 of 1 percent.

*Distribution of Initial Grants to Old-Age Assistance Recipients, July 1937-June 1938,
by Amount and State, and Median Grants—Continued*

State	Num- ber of recip- ients	Percent of recipients with initial grants, per month, of—									Me- dian grant
		Un- der \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	\$20.00 to \$24.99	\$25.00 to \$29.99	\$30.00 to \$34.99	\$35.00 and over		
Pennsylvania.....	20,266	0.9	1.6	23.1	18.5	26.0	18.5	11.4	-----	-----	\$20
Rhode Island.....	2,588	-----	4.7	28.0	23.3	23.8	13.9	6.3	-----	-----	18
South Carolina.....	24,415	.3	43.7	37.4	12.4	6.2	-----	-----	-----	-----	10
South Dakota.....	8,988	.2	3.0	22.1	43.9	21.7	6.6	2.5	-----	-----	17
Tennessee.....	24,647	(2)	15.4	51.8	22.5	6.8	3.5	-----	-----	-----	12
Texas.....	16,934	-----	15.7	49.9	25.3	7.6	1.4	.1	-----	-----	13
Utah.....	7,585	.1	2.0	5.1	18.8	23.2	16.0	34.4	-----	0.4	25
Vermont.....	2,052	-----	16.2	42.1	25.9	11.0	2.8	2.0	-----	-----	10
Virginia.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Washington.....	9,858	-----	.1	9.9	14.0	28.8	17.7	29.5	-----	-----	23
West Virginia.....	4,498	.2	12.5	48.5	27.5	7.3	2.3	1.7	-----	-----	12
Wisconsin.....	9,209	.2	3.9	20.4	29.5	20.1	13.5	12.4	-----	-----	18
Wyoming.....	531	-----	1.9	10.9	26.4	31.2	19.4	10.2	-----	-----	20
Dist. of Columbia.....	987	-----	.7	13.2	13.5	20.3	27.6	11.2	10.0	3.5	25
Alaska.....	554	-----	-----	2.0	30.5	12.3	4.9	28.7	-----	21.6	30
Hawaii.....	945	.3	16.3	57.2	17.9	2.9	1.7	3.7	-----	-----	11

¹ Less than $\frac{1}{10}$ of 1 percent.

Some grants of less than \$15 per month were approved in all States. In Arkansas all grants approved during 1937-38 and in 18 other States more than half of all grants were for less than this amount. On the other hand, in 27 States the majority of the grants were for from \$15 to \$29. Grants of \$30 were approved in 43 States; in 8 of these they comprised one-fourth or more of all grants. Since, under the terms of the Social Security Act, the Federal Government may match one-half the grant up to a total of \$30, grants of this amount are of particular significance as an indication that the Federal limitation tends to encourage States to set a similar maximum. Grants of \$31 or more were approved in only nine States. Substantially all the grants in this bracket were approved in California, Colorado, New York, and Massachusetts.

The report emphasizes that, in interpreting sectional differences in the level of assistance grants, the reader should bear in mind that the amount is dependent upon such factors as the provisions of State laws, cost and standard of living, availability of tax resources, degree of urbanization, existence of supplementary income, wage levels, and public attitude toward the problem of dependency.

As noted, the national median (all cases combined) was \$18 in 1937-8. For persons living alone the median was \$21 (\$20 for males, \$21 for females). For those living in household groups the median was \$17, and for those living in institutions \$26. In the latter case, the report states, the amount covers for a considerable proportion of the recipients the cost of medical and nursing care.

PENSIONS FOR THE BLIND IN CANADA

PENSIONS for the blind in Canada are payable under an extension of the old-age pension act. According to a recent account,¹ the blind pensioner in Canada really receives the old-age pension, but he receives it at the age of 40 instead of at the age of 70. The first allowances for the blind were paid October 1, 1937. At the end of the first year there were 3,850 beneficiaries on the roll—estimated as over 30 percent of the total number of blind in the whole country.

Because of constitutional and legislative difficulties, assistance to the blind was long delayed. The division of State and Federal powers in Canada is somewhat the same as in the United States, except that the field of each is less clear cut. "The Federal Government is reluctant to invade the fields usually assumed to be the exclusive territory of the Provinces, and the Provinces, particularly when it comes to new legislation which involves the expenditure of money, hesitate to act, in the hope that the central Government may shoulder the responsibility."

Old-age pensions are provided under legislation passed by the Canadian Parliament which must in turn be accepted by legislative action on the part of the Provinces. In response to pressure of public opinion, the Federal Government proposed that, if the Provinces were willing to share in the expense and responsibility of administration, an amendment be passed adding blind pensions to the old-age pensions act. Such an amendment was passed on March 22, 1937, and on October 1 of the same year the first payments were made.

All of the Provinces signed agreements with the National Government, so that both blind and old-age allowances are being paid under a nation-wide system.²

As in the case of old-age assistance, the Canadian Government pays 75 percent of the cost and the Provinces 25 percent. In order to qualify for a blind pension, the applicant must be over 40 years of age; a Canadian citizen; a resident of Canada for 20 years, and of the Province in which he receives the pension, for 5 years; and have less than 10 percent of normal vision.

The maximum allowance is \$20 per month. In the case of single persons having an annual income of \$200 or married persons with over \$400, deductions are made, from the blind allowance, corresponding to the excess in income. The allowances actually being paid average about \$19 per month.

¹ Outlook for the Blind (New York), December 1938, pp. 165-168: "Pensions for the Blind in Canada, 1938," by Harris Turner.

² For data on old-age pensions in Canada, see Monthly Labor Review, January 1939 (p. 69).

Industrial and Labor Conditions

WORKING CONDITIONS OF PECAN SHELLERS IN SAN ANTONIO

SUBSTANDARD conditions were revealed by an investigation of the pecan-shelling industry in San Antonio, Tex., by the Wage and Hour Division. The investigation was made as a result of the application of an employer in the industry for temporary exemption from the minimum-wage provision of the Fair Labor Standards Act, 1938.¹

Pecans harvested are of two kinds—"seedling pecans" the crop of which is from 54 to 56 million pounds annually, and "paper-shell pecans" of which there are 16 to 18 million pounds. Seedling pecans are grown chiefly on native wild trees in Texas, Louisiana, Mississippi, Arkansas, Oklahoma, and in small volume in Mexico. Approximately half the crop originates in Texas. Although the trees are not cultivated, farmers do some clearing of brush, etc., to promote the growth of the bearing trees. The nuts are picked in the autumn and sold to dealers and shellers.

In general, paper-shell pecans and the larger seedlings are sold in the shell, and the smaller seedlings are shelled before marketing. Shelling and picking out the meats furnish the greatest part of the work in the industry. Wholesale handlers, who buy the nuts from the growers and dealers, shell, pack, and market the meats. They are known as "shellers." Operations are carried on mainly in San Antonio, St. Louis, and Chicago. Two companies buy and market about 75 percent of the total crop. Before 1930, farmers received an average of 13½ cents per pound f. o. b. shipping point, for unshelled nuts. Since then the price has ranged from 5 to 11 cents, the average price being substantially less than that of the earlier period.

The usual practice for many years has been to use shelling machines which graded, cracked, and conveyed the pecans to tables or belts on which they were hand picked or cleaned to remove shells. In San Antonio, however, the work has all been done by hand since 1926. The petition for a low rate of pay for learners was made by a firm in that city. This firm replaced the mechanized process by hand work, in connection with introduction of a contractor system. The com-

¹ U. S. Department of Labor. Wage and Hour Division. Press release No. R. 158, January 23, 1939.

pany bought nuts from farmers and dealers and turned them over to contractors who hired crackers and pickers to shell them. Rates of pay for pecan workers were 5 to 6 cents a pound for the two principal grades. An average worker picked or shelled 8 or 9 pounds of hand-cracked nuts per day, and weekly earnings averaged \$2.50 to \$3.50. Frequently a family of 2 to 4 persons was employed.

The pecan company thus avoided the direct responsibility of an employer and benefited from the substandard conditions of employment, while the taxpayers bore a part of the labor cost in paying for the relief that was furnished to the pecan shellers.

With relatively low shelling costs, simple mechanical installations, and only moderate investment for plant requirements, the industry has been fairly prosperous. Even the plant investment was avoided by the San Antonio company operating on the contract system.

The contractors operated until the Wage and Hour Law went into effect in October 1938.

Labor organized in 1938 in the Pecan Workers' Union of San Antonio, a local of the United Cannery Agricultural Packing and Allied Workers of America. A strike was called to protest further wage reductions. A committee headed by the mayor effected a settlement whereby workers secured an increase of one-half cent per pound of nuts. However, when the Wage and Hour Law went into effect on October 1938, the workers became unemployed again and the company began to install machine equipment. It was expected that employment would be furnished to 2,500 to 3,000 persons when work was resumed on a regular schedule.

The company applied to the Wage and Hour Division for a 90-day exemption from the minimum-wage provisions of the Wage and Hour Law on the ground that the entire processing operation must be learned now that machinery was to be used. In reviewing the case, the Government found from experimental work and from the testimony of other employer and employee representatives that practically no learning period was necessary. In practice, shelling or picking after the nuts are cracked by machine is easier than under the old system. A picker trained to shell by hand is already a trained and experienced worker for the same work in the machine-equipped plant. It was estimated that employees could become proficient pickers under the new conditions in 2 to 10 days.

Average daily output increased from the 8 to 9 pounds, when cracking was done by hand, to 14 to 34 pounds under the machine system. An investigation made by a management consultant disclosed that, regardless of method, labor in shelling accounts for 60 to 80 percent of the costs.

The real problem of the employer, it was stated, is to obtain an adequate, technically trained supervisory staff. This will require time. No reason was seen for penalizing the worker, by paying him substandard wages, during the period necessary to train the managerial force, install machinery, and get production fully under way. Only the applicant company and one other employer supported the application for the wage exemption for learners. All the others opposed it, and the conclusion was reached that the application represented neither the needs nor the wishes of other important sections of the pecan-shelling industry. The application was therefore denied.



WORKING CONDITIONS UNDER THE TVA

THE number of employees of the Tennessee Valley Authority was 12,791 at the end of June 1938. The decline of 975 employees as compared with the previous year was caused primarily by the practical completion of the Pickwick Landing Dam project.

The report of the Authority for 1937-38¹ notes that, basically, all hiring of workers, changes of status during employment, and terminations are made "on the basis of merit and efficiency and in accordance with the principles of a career system."

Wage levels are fixed on the basis of prevailing rates and are adjusted, as changes occur in those rates, after conference with union representatives. The third such conference took place during the year under review and lasted from November 16, 1937, to February 5, 1938. Separate negotiations were carried on for three groups: (1) Construction employees paid by the hour; (2) employees in the manufacturing division of the fertilizer works, paid on an annual basis; and (3) all other employees on an annual basis. The conferences resulted in recommendations for some increases in pay in several classifications, and for certain changes in procedures, overtime rates of pay, and job classifications.

Union-management cooperation.—At the Muscle Shoals fertilizer works a successful plan of union-management cooperation has been worked out. Under this plan every employee's work is reviewed every 3 months by his supervisor. This is done, in the case of union members, in the presence of the shop steward of the union involved, and the forms used in the rating were devised by the various unions. It is pointed out that TVA's interest in this is from the standpoint of increasing efficiency and not for building up possible causes of discharge. As the employees have become convinced of this they "have become more favorable to thorough and critical appraisals of their

¹ United States. Tennessee Valley Authority. Annual report for the fiscal year ended June 30, 1938. Washington, 1938. 2 vols.

work so that weaknesses can be corrected and the range of skills increased."

Unions and management are also cooperating in the handling of grievances and jurisdictional disputes. These are taken up promptly through shop stewards and supervisors. In the opinion of the Authority, "the primary value" of the system is that "orderly and recognized procedures have been established through which problems of concern to either management or the unions may be explored jointly and mutually satisfactory conclusions reached."

Training of employees.—One of the tangible results is a new interest, on the part of the employees, in training opportunities and an expansion by the Authority of in-service training. As it is the policy to fill vacancies by promotion from within the staff, the Authority has realized the need of providing training so that employees may fit themselves for advancement. An apprenticeship system, on a Valley-wide basis, has been created for skilled and semiskilled crafts of largest employment in construction work. At each TVA project a committee handles the apprenticeship program. These committees are composed of the general craft foremen (representing the management), the local union representative, the State supervisor of vocational education, the local supervisor of job training, and the local representative of the TVA personnel department.

In addition, at each project there is also a joint committee, consisting of the TVA construction superintendent, the secretary of the Tennessee Valley Trades and Labor Council, the State supervisor of vocational education, the local supervisor of job training, and the local TVA personnel man. These committees have adopted a standard plan to govern apprentice training.

Other training courses include those in hydro-plant operation, in the work of powdermen, in engineering planning and design, accounting, transmission-line theory, and public administration. Three special training plans are (1) the student engineering plan, which alternates work on the campus and on the job; (2) assistantships (training for professional jobs), open to college graduates and providing for a year's intensive training; and (3) internships, offering a year's work for undergraduates nominated by their universities, after which they are expected to return to college.

Retirement for TVA employees.—The question of a retirement system has been under consideration since 1934. A study was made by an actuarial consultant in 1936 and 1937, and a joint committee of employer and employee representatives was established to aid in the formulation of a plan. A plan has been drawn up which, at the time of the report, awaited only the determination of certain legal questions before being submitted to the board of directors.

Housing.—As the employer of a large and widely scattered staff, it has been the policy of the Authority to supplement the housing available in the immediate vicinity of the project. For employees at Chickamauga Dam, housing was available in the city of Chattanooga and the Authority had to provide no supplementary facilities. At the site of the Norris Dam, however, it was necessary to provide a permanent town and this was done, creating Norris, Tenn. Temporary villages have been built to house workers at the Wheeler, Pickwick Landing, Guntersville, and Hiwassee projects. Three small villages that had been built in the Muscle Shoals area during the construction of Wilson Dam were taken over by the Authority in 1933.

During 1937-38 it had charge of the operation of 1,044 single-family dwellings and 22 dormitories.

All the villages are supplied electricity, water, schools, police and fire protection, sewage-disposal and garbage-removal systems, and maintenance of roads, streets, and walks.

Health and safety.—The TVA has certain functions both in regard to public health in the Valley and in regard to the health and safety of its employees.

In cooperation with the United States Public Health Service and the various Valley State health departments, the Authority makes studies of stream pollution, conducts malaria control operations in its reservoir areas and studies of methods for reducing malaria incidence, assists in tuberculosis studies, and aids in the strengthening of local health services in the area.

The Authority provides direct medical care for ill and injured construction employees, physical examinations and immunizations, medical care in areas where private aid is not available, rehabilitation of the injured, and clears service-connected injuries with the United States Employees' Compensation Commission. It seeks to control communicable diseases, and protect employees against industrial health hazards. It constantly strives to reduce construction accidents through use of safety devices and in TVA villages and construction camps conducts strict supervision of water supplies and sewage disposal.

A number of studies have been made or are under way, involving questions of potential hazards to employees working with various substances or at specific processes. A study was started during the year to determine the relationship of environment and working conditions to the efficiency and health of a selected group of office employees.

In 1937-38, of 25,166 occupational injuries, only 661 involved a loss of working time. On the basis of man-hours worked, the lost-time accidents had a frequency rate of 26.7 per million man-hours; the severity rate was 3.60 per thousand man-hours.

Employment Conditions

UNEMPLOYMENT IN CANADA, 1921 TO 1938

APPROXIMATELY 15 percent of the total estimated number of wage earners in Canada in 11 months of 1938 were unemployed, as compared to 2.5 percent in 1928 and 4.2 percent in 1929. In 1933 the proportion unemployed was as high as 26.5 percent.

The number of employed wage earners during 11 months of 1938 showed an increase of slightly more than one-eighth as compared with 1926. The number of unemployed, however, was more than four times as great.

Estimates are given below of the total number of employed and unemployed wage earners, by years, 1921 to 1937, and for 11 months of 1938.

Estimated Numbers of Employed and Unemployed Wage Earners in Canada, with Indexes, 1921 to 1938

[1926=100]

Year	Total		Employed		Unemployed		Percent of unemployed in total number
	Number (in thousands)	Index	Number (in thousands)	Index	Number (in thousands)	Index	
1921.....	1,971	92.1	1,795	87.9	176	177.8	8.9
1922.....	1,967	91.9	1,830	89.6	138	139.4	7.0
1923.....	2,059	96.2	1,958	95.9	101	102.0	4.9
1924.....	2,042	95.4	1,897	92.9	145	146.5	7.1
1925.....	2,063	96.4	1,920	94.0	144	145.5	7.0
1926.....	2,140	100.0	2,041	100.0	99	100.0	4.6
1927.....	2,209	103.2	2,147	105.1	62	62.6	2.8
1928.....	2,359	110.2	2,299	112.6	60	60.1	2.5
1929.....	2,551	119.2	2,444	119.7	107	108.1	4.2
1930.....	2,654	124.0	2,313	113.3	341	344.5	12.8
1931.....	2,537	118.6	2,095	102.6	442	446.5	17.4
1932.....	2,459	114.9	1,820	89.1	639	645.5	26.0
1933.....	2,434	113.7	1,788	87.6	646	652.6	26.5
1934.....	2,574	120.3	2,045	100.1	529	534.4	20.6
1935.....	2,626	122.7	2,126	104.1	500	505.1	19.1
1936.....	2,671	124.8	2,225	109.0	447	451.6	16.7
1937.....	2,706	126.4	2,369	116.1	337	340.4	12.5
1938 (11 months).....	2,704	126.4	2,303	112.8	401	405.1	14.8

The above data were prepared by the Social Analysis Branch of the Dominion Bureau of Statistics, which in making the estimates defined a wage earner as "one who holds or has held a job," and the unemployed as "those who normally work for pay, but are not gainfully employed at the time."

MEASURES RELATING TO DEPRESSED AREAS IN GREAT BRITAIN

COMPULSORY location of industries in the distressed areas of Great Britain was unsuccessfully advocated by Labor Party members of the House of Commons, in the debates held on November 28, 1938, on continuance of the Special Areas (Amendment) Act of 1937. The occasion for this debate was an opposition (Labor) motion to delete the subsection of the bill providing for a year's continuance of the law. The purpose of the motion was to permit an expression of labor's dissatisfaction with operations under the legislation, and to urge the Government to adopt a bolder policy. In the ensuing discussion the existing methods were defended, and the dangers of compulsion were cited by the Minister of Labor. The Labor motion was rejected by the House of Commons in committee, without a division vote.

In the course of the debates, it became evident that, whereas the Government was dealing with the distressed areas as a localized problem, the labor group was advocating control of agriculture and industry as a dual measure of national defense and unemployment relief. The issues discussed are summarized briefly here,¹ as are also certain general statements of commissioners of the special areas in their annual reports.²

History of the legislation.—Legislative action was taken in 1934 in order to alleviate distress in certain districts of Great Britain termed "special areas," where unemployment was abnormally high. These districts had been centers for the heavy industries, chiefly mining, shipbuilding, and iron and steel. Reduction in operations had involved a similar recession in trade, and as new activities were not established, acute unemployment became chronic.

The terms of the 1937 law continued the Special Areas (Development and Improvement) Act of 1934 in effect until March 31, 1939, and enabled the Government to give further assistance to the special areas and also, under certain conditions, to other areas.

Specifically, the 1937 law authorized the commissioners of special areas to induce persons to establish industrial undertakings in the areas designated, by renting factories to employers, and by granting them financial assistance in the form of concessions as to rent, income taxes, or other taxes, for not more than 5 years. In addition, the law authorized financial aid to local authorities in these areas. It

¹ Data are from report of Russell W. Benton, American vice consul, London, December 6, 1938; British Ministry of Labor Gazette, April and May 1937 (pp. 135, 173); Great Britain, House of Commons, Parliamentary Debates, November 28, 1938; and Monthly Labor Review, February 1937 (p. 375).

² Great Britain. Reports of Commissioners for Special Areas in England and Wales for year ended September 30, 1938 (Cmd. 5896); and in Scotland for period September 1, 1937, to September 30, 1938 (Cmd. 5905).

also permitted loans to certain companies outside the special areas, which meet the conditions specified, and authorized purchase of some of their capital stock.

Policy advocated by labor.—Recommendations of labor members of the House of Commons were that the Government should adopt the principle of compulsion rather than persuasion in allocating new industries to the special areas; that it should forbid unemployed labor to be moved to new industries in already congested areas such as London and Birmingham, and should require the industries to go to the areas of unemployment; that greater efforts should be made to substitute for imports the domestic production of a wide range of commodities; and that the program should be worked out in terms of the national economy rather than of regional economy, giving attention to the need of rehabilitating agriculture and decentralizing industry in order to render the country more self-sufficient in case of war.

Labor members speaking in the course of the debate referred to the stubbornness of the problem and failure of the relief measures taken to reduce the number of unemployed. It was stated that the agricultural problem remained as acute as it had been before remedial legislation was passed.

In the opinion of other members, legislation for the special areas, having been enacted as an experiment, had been given sufficient time to prove its inadequacy. Action was asked on the ground that statistics revealed an unusually high sickness and death rate in the distressed areas. The male death rate in Durham, for example, was stated to be far above the national average.

Particular concern was expressed over the plight of child workers and older workers. With children going to work who should be at school, and over 750,000 people of 65 and over employed who should be on adequate pensions, persons in middle life, it was stated, were unemployed. In other instances, men of 45, having lost their jobs, had no expectation of again securing employment.

As the solution of the problem had been stated to be the encouragement of trading estates (i. e., especially established self-contained villages with factories for light industries) and new industries, labor questioned why more establishments had not been created.

The view was expressed that unemployment should have been dealt with as a whole, and that a larger sum of money should have been spent in all areas, instead of making expenditures for unemployment relief and assisting restricted areas.

Emphasis was placed upon the need for preventing mass migration of labor into already overcrowded districts such as Greater London and Birmingham. If the expense or inadequacy of transportation is retarding development of industries where the unemployed live,

labor urged, an attempt should be made to correct the existing conditions.

It was also urged that cognizance should be taken of the displacement of labor through mechanization, that experiments in the use of new kinds of equipment should be extended, and that industries such as engineering should aid if they are not financially able to develop new lines of production to include articles now being imported from abroad.

Statement of Minister of Labor.—The Minister of Labor summarized the points brought out in the debate, showing that certain proposals lacked concreteness, and answering some queries. He stated that the problem of aiding the special areas had been approached, as outlined in the enabling legislation, with a view to diversifying industrial development and that the effect of the legislation on the special areas had been good. In discussing the general problem of the relative merits of compulsory and voluntary location of industries, a passage from an earlier report on the subject was quoted, as follows:

Some advocate the compulsory location of industry as a sure cure for unemployment, but this I regard as unnecessary and dangerous. National prosperity depends upon industrial success. Industrial success in turn depends upon the effort and enterprise of the individual and upon efficiency. I am unable to foresee that these factors would be likely to be maintained, still less improved, through the exercise by Government of general compulsion in determining the location of industry. Whatever expectations theorists may envisage from its application, it would certainly under present conditions cause dislocation, not to say chaos, seeing that there is an altogether insufficient degree of cooperation in individual industries with the trade-unions to offer a sound basis for its operation. The immediate result of its application under such conditions would undoubtedly be increased unemployment.

Reports of commissioners.—Reports of the commissioners for the special areas were subsequently issued, covering operations in England and Wales and in Scotland, respectively, for the period ending September 30, 1938.

The Commissioner for England and Wales stated that in the 12-month period for which he was reporting he had been concerned with work previously started rather than with development of new activities. Special effort had been made to induce new industries to come to the depressed areas. Experience had shown that attractive trading estates are well supported, and such estates had made satisfactory progress. There had also been a number of cases of rental of factories on sites outside trading estates. The commissioner believed that the provision of the law of 1937 which grants him the right to establish such factories had been of great value, as in the special areas there is a lack of modern factories suitable for light industries. Likewise, attention was directed to the value of capital grants to worthy industrialists, in this period when heavy taxation has reduced capital

available from large private fortunes. Finally, it was stated that in view of the adverse effects of the recession the progress made was especially satisfactory.

The commissioner advised continuance of the special-areas legislation, pending the report of the Royal Commission on the Geographical Distribution of the Industrial Population, and even if that report should recommend restrictions on the industrial growth of the larger cities, London and Birmingham, which in itself would encourage new activity in the special areas. He stated: "The results of the efforts to induce industries to come to the special areas are only just beginning to show themselves and I intend that the work should proceed with unabated energy."

In evaluating the results of legislation on special areas in Scotland, the commissioner concluded that the foundations being laid for solving the unemployment problem were sound, but that the problem was not yet nearing solution. The public-works projects, which were not initiated as a means of relieving unemployment, will nevertheless be valuable in reducing the number out of work and the industrial schemes for the express purpose of increasing employment are only in their infancy.

He pointed out that a temporary boom in heavy industries will give only temporary relief, and that it is necessary to decide upon the ratio of primary to secondary industries, on which basis it can be decided what public services are needed. In order to attract new industries, steps have been taken to make the special areas more attractive, to improve the quality of the labor supply, and to provide factories and factory sites. By this combined attack it is hoped to revive the areas economically and socially. Social revival is viewed as necessary to industrial rehabilitation, since the prolonged depression has brought community life practically to a standstill.

Labor Involved in Industrial Production

LABOR REQUIREMENTS IN MANUFACTURE AND DISTRIBUTION OF ELECTRICAL PRODUCTS ¹

By BERNARD H. TOPKIS, *Bureau of Labor Statistics*

A STUDY made by the Bureau of Labor Statistics, as part of a series on the construction industry, indicates that for every \$1,000 worth ² of electrical machinery, apparatus, and supplies produced and distributed in the United States in 1937, 651 man-hours of labor were required.³ Of this labor, 37 percent was required in the production of raw materials used; 2 percent was required for transporting these materials to the factories; manufacturing took 48 percent; engineering and development, 5 percent; administrative and selling activities of the companies, 7 percent; and transportation by rail and truck of the finished product from the factory to the site of construction, 1 percent. These figures were based upon a study of labor requirements for 13 major groups of products manufactured by 14 electrical-manufacturing

TABLE 1.—*Distribution of Cost of Production and Distribution of \$1,000 Worth¹ of Electrical Products, in Terms of Money and of Man-Hours of Labor in 1937*

Item of cost	Cost	Man-hours	
		Number	Percent
All items.....	\$1,000	651	100.0
Raw-material production.....	387	237	36.4
Transportation of raw material.....	20	15	2.3
Manufacturing labor ²	260	313	48.1
Engineering and development labor ³	42	33	5.1
Administrative and sales labor ⁴	59	45	6.9
Transportation of finished product ⁵	23	8	1.2
Other ⁶	209	(7)	(7)

¹ Based on cost at the site of construction.

² Based on average earnings of \$0.83 per hour.

³ Based on average earnings of \$1.27 per hour.

⁴ Computed at \$1.30 per hour.

⁵ Includes both rail haul and drayage to site of construction.

⁶ Includes taxes, depreciation, rent, profit, insurance, depletion, advertising, and telephone, telegraph, and postage.

⁷ Not available.

¹ Prepared under the direction of Herman B. Byer, chief of the Bureau's Division of Construction and Public Employment. Seventh of a series of studies on labor requirements in the manufacture and transportation of construction materials. For previous articles see *Monthly Labor Review*, May 1935, p. 1155 (steel); March 1936, p. 564 (cement); May 1937, p. 1136 (lumber); October 1937, p. 846 (rail transportation of construction materials); December 1937, p. 1391 (clay products); June 1938, p. 1381 (plumbing and heating supplies).

² \$1,000 worth of products refers to cost at site of construction, and includes cost of rail transportation and drayage of finished product from factory to site of construction.

³ These man-hours account for only about 79 percent of the total costs. It was not possible in the study to ascertain the labor involved in such items as taxes, depreciation, rent, profit, insurance, depletion, advertising, and telephone, telegraph, and postage.

companies, which produced about \$710,000,000 worth of electrical machinery, apparatus, and supplies in 1937.

The preceding table shows the distribution of cost and of man-hours required, for every \$1,000 worth of product, among the various stages or departments of production.

For each of the 13 major groups of electrical products the following statement shows the man-hours required to produce and distribute \$1,000 worth of product.

	Man-hours per \$1,000 of product ¹
All groups of products.....	651
Turbines.....	707
Large motors and generators.....	632
Small motors.....	643
Fractional horsepower motors.....	780
Transmission and distribution equipment.....	588
Switch gear.....	582
Control.....	587
Transportation equipment.....	653
Meters and instruments.....	566
Wire and cable.....	613
Wiring supplies and appliances.....	659
Plastics.....	742
Refrigerators.....	566

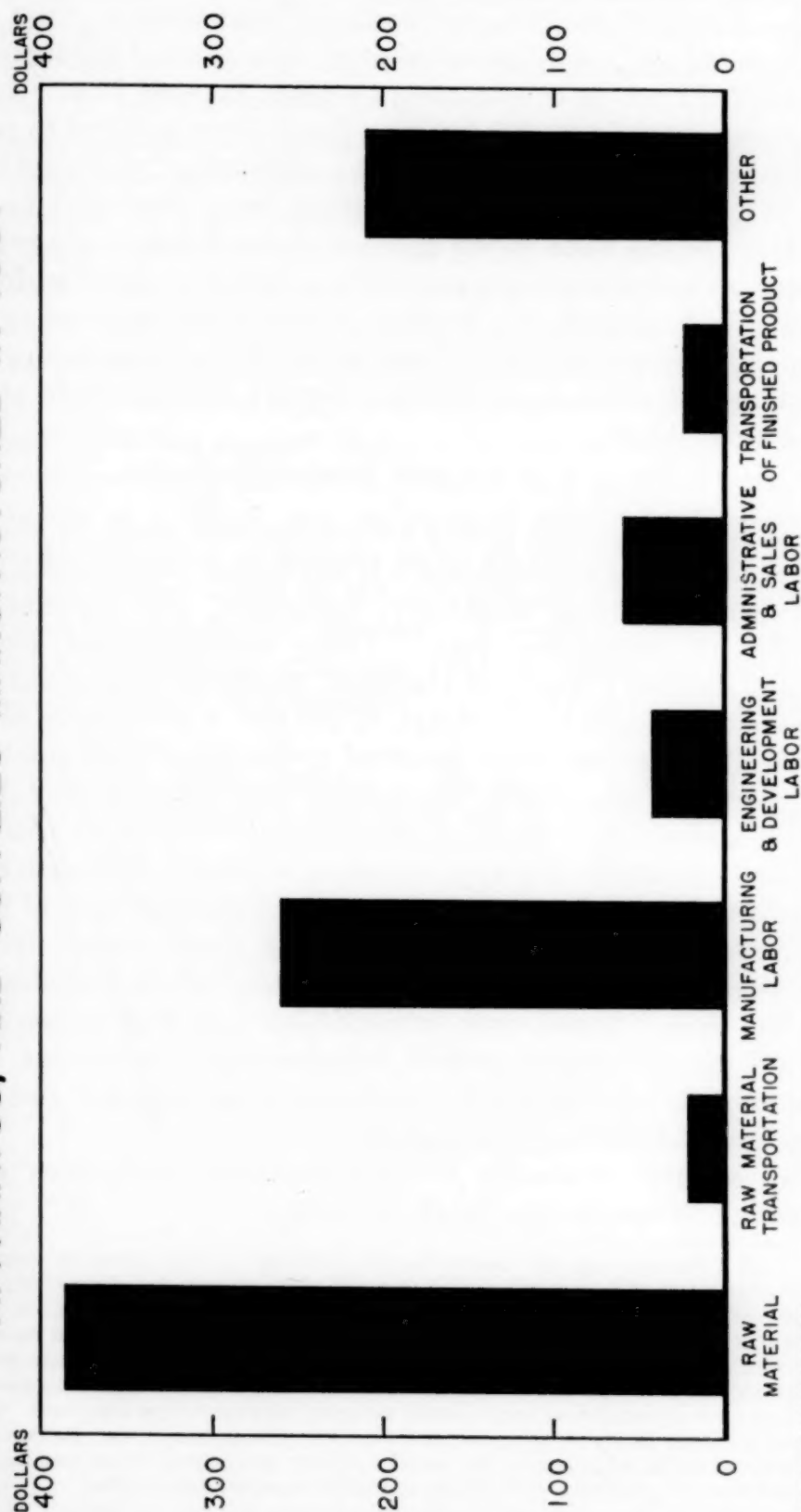
¹ This value is based on cost at site of construction.

Similar data on the number of man-hours required to produce and distribute 26 selected items in these 13 major groups of electrical products were also obtained. They are shown in table 2.

TABLE 2.—Number of Man-Hours Required to Produce and Distribute 26 Electrical Commodities in 1937

Commodity	Unit of measure	Man-hours
Turbo-generator set, 3,000 kw.....	1.....	34,845
Turbine generator set, 35,000 kw.....	1.....	240,346
Horizontal waterwheel generator, 10,000 kv.-a.....	1.....	30,742
Induction motor, 60 hp.....	1.....	166
Induction motor, 5 hp.....	1.....	25
Motor, ¼ hp.....	100.....	350
Transformer, 5,000 kv.-a.....	1.....	3,608
Transformer, 450 kv.-a.....	1.....	836
Oil circuit breaker, 50,000 kv.-a.....	1.....	131
Magnetic switch, 25 a.....	100.....	316
Diesel oil electric locomotive, 660 hp.....	1.....	22,207
2-wire w.-hr. meter.....	100.....	319
Cable, 3-conductor, lead-covered.....	1,000 feet.....	455
Flexible cable, 2-conductor, steel-covered, No. 14.....	1,000 feet.....	14
Cable, nonmetallic-sheathed, 2-conductor, No. 14.....	1,000 feet.....	8
Magnet wire, .102.....	1,000 pounds.....	95
Building wire, No. 14.....	10,000 feet.....	26
Pull socket.....	1,000.....	95
Convenience duplex outlet.....	1,000.....	37
Tumbler switch, single pole.....	1,000.....	76
Outlet box.....	1,000.....	65
Switch box.....	1,000.....	72
Entrance switch.....	100.....	165
Conduit, ½ in.....	1,000 feet.....	35
Toggle wall plate, 2-gang.....	1,000.....	20
Refrigerator, 6 cu. ft.....	1.....	49

DISTRIBUTION PER \$1,000 EXPENDED FOR ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES MANUFACTURED IN 1937



U. S. BUREAU OF LABOR STATISTICS

Effect of Federal expenditures on employment in the electrical industry.—About 50,000,000 man-hours of labor were required to produce and distribute the \$77,000,000 worth of electrical products purchased in 1937 for use on construction projects financed from Federal funds.

Approximately 98,000,000 man-hours were required to produce and distribute the electrical machinery, apparatus, and supplies used in P. W. A. construction projects alone, from July 1933 to September 1938. On the basis of the findings of the Bureau's study in the electrical-manufacturing industry it was possible to compute, for each type of P. W. A. project, the number of man-hours required per \$1,000 of Federal funds expended. These ranged from 9 man-hours on the construction of water-supply systems to 271 man-hours on steam power and light plants.

Scope and Method of Study

In 1937, according to the United States Census of Manufactures, there were 1,435 establishments in the United States which were manufacturing electrical machinery, apparatus, and supplies valued at \$5,000 or more per year.⁵ These establishments manufactured \$1,622,098,291⁶ worth of electrical machinery, apparatus, and supplies and employed an average of 257,660 wage earners in 1937. To determine the man-hours involved in the production and distribution of electrical machinery, apparatus, and supplies manufactured in 1937, a study was made of the pay-roll and cost records of 14 companies, manufacturing approximately \$710,000,000 worth of electrical products in 1937.⁷ These products were grouped into 13 major lines: Turbines, large motors and generators, small motors from 1 to 15 horsepower, fractional horsepower motors which includes all motors of less than 1 horsepower, transmission and distribution equipment, switch gear, industrial control, transportation equipment, meters and instruments, wire and cable products, wiring supplies and appliances, plastics, and electric refrigerators.

As already indicated, a supplementary study was also made, covering 26 specific electrical products.

⁵ Census of Manufactures, 1937—Release No. 1303 (December 29, 1938). Under the census definition, this industry embraces establishments engaged primarily in the manufacture of machinery, apparatus, and supplies for employment directly in the generation, storage, transmission, or utilization of electric energy. It does not include establishments whose principal products (over 50 percent of total value of products) are electric-lighting fixtures, electric signs, or motor-driven tools, mechanical refrigerators, washing machines, radios, and other machines and appliances constructed with built-in motors, or other electrical equipment (such machines and appliances being classified for census purposes in other industries). The manufacture of radio-apparatus parts such as transformers, batteries, coils, condensers, etc., are treated as products of the electrical machinery, apparatus, and supplies industry, as such products are manufactured principally by establishments classified in this industry and sold to manufacturers of radios.

⁶ This value does not include electric refrigerators nor steam turbines. According to the release of Census of Manufactures for 1937, \$16,261,123 worth of steam turbines were manufactured in 1937 (Release No. 1304, December 7, 1938); \$363,788,412 worth of refrigerators and refrigerating and ice-making apparatus were manufactured in 1937 (Release No. 1310, December 30, 1938).

⁷ This does not include the manufacture of incandescent bulbs; nor does it include lighting fixtures and radio equipment except in cases where these products have been made by large companies as a part of their full line of apparatus and supplies.

The data for both studies were based on production and prices in 1937, and the conclusions are applicable to that year only, since changes in price level from year to year will affect the interpretation for any other period. It was not feasible to express the man-hours required for the industry as a whole in terms of units of any product or group of products, because the industry is composed of many diverse branches, having unique products and manufacturing problems.

The total labor required to produce and distribute electrical products is the sum of the labor required for producing the raw materials, transporting the raw materials to the factory, manufacturing the finished product, the engineering and development and administrative and sales labor of the companies which produce the finished product, and transporting the finished product from the factory to the point of use. The unit for measuring the labor required for each of these functions for the industry as a whole, and for each of the 13 major lines of product was \$1,000 worth of product based on the selling price at the factory. The total man-hours for the industry as a whole and for each of the 13 major lines of product were also computed in terms of \$1,000 worth of product based on cost at the site of construction; i. e., the selling price of the goods at the factory plus the cost of rail freight and drayage.

NOTE.—More detailed information based on this study is published in a pamphlet entitled "Labor Requirements in Manufacture and distribution of Electrical Products" (Serial No. R. 883), which may be obtained upon request.

Productivity of Labor and Industry

PRODUCTIVITY AND EMPLOYMENT IN THE BEET- SUGAR INDUSTRY

BETWEEN 1917 and 1935 the productivity of labor in the manufacture of beet sugar doubled. No major changes in production methods occurred during this period, but there were numerous minor improvements. Among these was an increased application of electricity that made possible the use of instruments and devices for facilitating precise control of chemical processes and mechanization of handling operations. Better machine designing and improved modes of coordinating mechanical operations account for a part of the increased productivity. There were also advances in knowledge of chemistry in application to this industry. The increased volume of production tended to prevent the displacement of labor. The industry is highly seasonal, and although the aggregate number of workers connected with the various branches of beet-sugar production is considerable, the work is concentrated during short periods of the year and the annual earnings are only a fraction of a living wage for most of the workers employed by the industry. These are some of the findings of a recent study by the National Research Project of the Works Progress Administration in cooperation with the National Bureau of Economic Research.¹

Beet-sugar production was not developed on a large scale until after 1890. The growth of the industry has been almost continuous and has been affected only to a slight extent by business fluctuations. During the depression beginning in 1929, production increased sharply, and there was a marked decline after general business activity began to improve. The growth of the industry has been closely connected with the tariff and quota policies of the Government. The United States Tariff Commission estimated that in 1916, 43.2 percent of the industry was dependent on the Tariff Act of 1913 and earlier acts going back to 1897.

The amount of employment provided by sugar-beet growing, beet-sugar factories, and subsidiary enterprises, as expressed in yearly man-hours, was approximately 111,130,000 in 1917, and an average

¹ U. S. Works Progress Administration. *Productivity and Employment in Selected Industries: Beet Sugar*. By Raymond K. Adamson and Miriam E. West. Washington, 1938. (Studies of Productivity and Employment in Selected Industries, Report No. N-1.)

of 92,531,000 in 1934-35. The main part of this employment was in the growing of beets.

TABLE 1.—*Estimated Average Yearly Man-Hours of Direct and Indirect Employment, Beet-Sugar Industry, 1917-35*

Year	Total (thou- sands)	Growing and trans- portation of beets (thou- sands)	Processing (thou- sands)	Fuel for factories (thou- sands)	Machinery for factories (thou- sands)
1917.....	111,130	75,145	29,210	1,846	4,929
1920-24.....	111,977	82,656	25,931	1,899	1,491
1928-32.....	91,541	70,983	17,596	1,877	1,085
1934-35.....	92,531	72,004	17,601	1,851	1,075

An estimate was made of the number of persons dependent on the beet-sugar industry for a part of their income from employment in 1933. In that year the number employed in factories was about 30,000. There were about 70,000 sugar-beet growers and about 159,000 hired laborers in the beet fields. It is estimated that the number who found employment in the production of fuel used in beet-sugar factories was about 2,000, and the number required for making machinery for these factories, about 1,000, while several thousand more found some employment in transportation and in the wholesale and retail distribution of sugar. The estimated total for 1933, a year of peak production, was between 262,000 and 270,000.

The most significant feature, however, of employment in this industry is its seasonal character. Most of the hired workers in the growing of beets have work for only a few weeks in the year and most of the workers in the factories in 1933 averaged not more than 72 days of work. The number of "campaign" days of factory production between 1917 and 1935 ranged from 89.6 in 1920 to 57.7 in 1934. Factory production is mainly during the last 3 months of the year, and employment is highly concentrated during these months.

TABLE 2.—*Index of Seasonal Employment in Beet-Sugar Factories, 1903-33¹*

[12-months' average=100]

Month	Index	Month	Index
January.....	68.6	July.....	53.6
February.....	32.4	August.....	74.4
March.....	32.8	September.....	99.3
April.....	38.2	October.....	254.2
May.....	42.9	November.....	258.7
June.....	46.8	December.....	198.1

¹ For basic data, see table A-2, p. 143, in the reference in footnote 1 on p. 564.

As a result of the highly seasonal character of the industry, both in the growing of beets and in the production of sugar, there is an exceptional amount of part-time, casual, and transient employment.

Obviously the income of the ordinary worker is not enough for a year's living, and opportunities for other types of work are slight. The number of workers in factories who have regular employment ranges between 3,000 and 4,000 while more than 20,000 have employment ranging around 70 days and an average income for the year from this industry of about \$225. Few of the large number of laborers employed in the growing of beets (about 159,000 in 1933) have more than 90 days' work in the beet fields, and very few find work in the beet-sugar factories after the harvesting season. Most of them are casual or transient workers. The effects of such conditions are apparent in an aggravated problem of public relief or emergency employment. Far more significant are the effects of inadequate employment and income on the workers and their families.²

The volume of production may be estimated, from the point of view of the growing of sugar beets, in terms of tons of beets sliced, and from the point of view of final output, in terms of tons of sugar produced. Production was at its peak in 1933, when 10,778,000 short tons of beets were sliced and when 1,636,000 short tons of beet sugar were produced.

TABLE 3.—*Sugar Beets Sliced and Beet Sugar Produced, 1899–1935*

Year	Beets sliced (thousands of short tons)	Sugar produced (thousands of short tons)	Year	Beets sliced (thousands of short tons)	Sugar produced (thousands of short tons)
1899.....	795	82	1924.....	7,423	1,083
1903.....	2,175	254	1926.....	6,711	899
1908.....	3,965	502	1928.....	6,951	1,086
1913.....	5,639	743	1931.....	7,620	1,165
1918.....	5,649	722	1933.....	10,778	1,636
1920.....	7,873	1,030	1935.....	7,745	1,186
1922.....	5,786	754			

In a group of factories for which data were available for the period 1917–35, the number of man-hours per unit of product during the "campaign" period of production was almost continuously reduced. In 1917 the number of man-hours per ton of beets sliced was 2.78, and in 1935, 1.35. In 1917 the number of man-hours per 100-pound bag of sugar produced was 1.02, and in 1935, 0.44.

Between 1917 and 1935, the productivity of labor (the average output per man-hour, which is the amount of labor per unit of output expressed inversely) increased about 106 percent in terms of tons of beets sliced, and about 132 percent in terms of sugar produced. This increase, as previously stated, was substantially a result of a large

² In regard to the labor aspects of production of sugar beets, see "Wages, Employment Conditions, and Welfare of Sugar-Beet Laborers," by Elizabeth S. Johnson, in the *Monthly Labor Review* for February 1938 (pp. 322–340); and *Changes in Technology and Labor Requirements in Crop Production: Sugar Beets*, by Loring K. Macy and others, Washington, Works Progress Administration, 1937, Report No. A-1.

Number of relatively minor technological changes. A notable characteristic of many industries in recent years is the introduction of technological changes that tend to save capital as well as labor. A rough indication of this tendency in the beet-sugar industry is the fact that the estimated capital investment in beet-sugar factories in 1918 was \$224,585,000, and in 1935, only \$208,076,000. During this period there was, however, a considerable decline in prices.

TABLE 4.—“Campaign”¹ Man-Hours per Unit of Product in 31 Identical Beet-Sugar Factories, 1917-35

Year	Number of factories operating	Man-hours per—		Year	Number of factories operating	Man-hours per—	
		Ton of beets sliced	100-pound bag of sugar produced			Ton of beets sliced	100-pound bag of sugar produced
1917.....	30	2.78	1.02	1927.....	29	1.65	0.57
1918.....	30	3.11	1.09	1928.....	30	1.62	.51
1919.....	29	2.76	1.13	1929.....	30	1.55	.55
1920.....	31	2.61	.93	1930.....	29	1.40	.51
1921.....	30	2.10	.73	1931.....	26	1.35	.45
1922.....	29	2.08	.76	1932.....	29	1.46	.47
1923.....	31	2.05	.76	1933.....	30	1.31	.43
1924.....	30	1.95	.64	1934.....	26	1.42	.45
1925.....	30	2.00	.74	1935.....	29	1.35	.44
1926.....	26	1.70	.63				

¹ Period of peak-season production.

Increased production tended to maintain employment, while increased productivity (or reduced labor requirements per unit of output) tended to curtail employment. The net result, as previously stated, was a reduction in the amount of employment, especially in factory production, between the years 1917 and 1935. During these years, the number of tons of beet sugar produced increased about 55 percent, whereas the estimated total number of yearly man-hours in all branches of the industry combined fell about 17 percent, during an increase of about 25 percent in total population.



LABOR EFFICIENCY IN THE SOVIET UNION

SEVERAL decrees designed to improve the efficiency of the workers were issued in the Soviet Union during December 1938.¹ These decrees introduced a “labor book” system similar to that in use in Germany,²

¹ The data on which this article is based are from *Izvestiya* (official Soviet daily), Moscow, issues of December 21, 22, 27, and 29, 1938, and January 1, 1939.

² See *Monthly Labor Review*, October 1935 (p. 937).

established rewards for outstanding service, and provided penalties for idling, unexcused absences from work, etc., and set forth a schedule of allowances for disability caused by sickness, accident, or old age.

Introduction of the "Labor Book"

Formerly a person applying for a job was required to present his passport and a statement from his last employer regarding quality of his work and the reasons for his separation from the job. This was changed, on December 21, 1938, with the issuance of a decree requiring all wage earners and salaried employees in the Soviet Union to be provided with a labor book, beginning January 15, 1939, containing the following information: Full name, father's name, worker's age, education, occupation, length of the employment, quality of work, transfers from one employer to another, and causes of transfers. All individual special encouragements and rewards for efficiency are also to be noted, but not fines or punishments.

Only the employer is to enter the required information in the book. This is to be done in two languages—Russian, and the language prevalent in the locality. No applicant may be given employment unless he presents his labor book. During the course of employment the book is kept by the employer, who returns it when the worker leaves.

The book costs the worker, in the first instance, 50 kopecks (about 10 cents), but if he loses it as a result of his own fault he has to pay a fine of 25 rubles (about \$5), after which a duplicate book is issued. The money received for the books or in fines is transferred to the State treasury.

Rewards for Efficiency

A series of decrees issued on December 27, 1938, established the title of "Hero of Socialist Labor" and provided for two silver medals, one for "labor valor" and the other for "labor excellence."

The title of "Hero of Socialist Labor" is to be bestowed upon workers for exceptionally efficient labor and inventive ability in the field of industry or trade, transportation, or agriculture, and for scientific discoveries. With this title are also to be given the "Order of Lenin," a diploma certifying to the worker's invention, a money reward, and all privileges and franchises granted to "Labor Heroes" under the provisions of the previous decrees.

The medal for "labor valor" is to be given for efficient labor in the building of the Socialist order, for outstanding service in the use of the Stakhanov efficiency methods, and for contributions to science, technique, and culture. Persons receiving the medal are also to receive a monthly allowance of 10 rubles (about \$2) from the State treasury, and have the privilege of riding free of charge on the street cars in the cities of the Soviet Union.

The medal for "labor excellence," is to be given for "shock work," high productivity, and service to science, technique, and culture. Recipients of this medal also may ride free on the street cars, and receive a monthly allowance of 5 rubles.

Hours of Work, and Absences

The decree of December 29, 1938, contained certain new provisions and some which merely strengthen those already in operation.

The length of the legal working day in the Soviet Union is variously 8, 7, and 6 hours, the 7-hour day being the most common. In order to reduce time lost by arriving late, leaving early, overstaying the lunch period, or idling on the job, the decree requires that each worker shall work the full hours each day required by the law.

Absence is to be permitted only for valid causes specified in the law. Absence without such cause is punishable by penalties of varying degrees of severity, including reprimand, transfer to another job, decrease of wages for 3 months, or demotion to a lower-paid job. A worker absent without valid cause three times during 1 month or four times during 2 consecutive months is to be dismissed.

In case a worker is dismissed and later reinstated his average wages are to be paid for his lost time but not for more than 20 days. Appeals against dismissal are provided for and such cases must be decided by administrative offices within 3 days and by courts within 5 days after receiving the appeal.

Service Requirements for Social Insurance

The decree of December 29, 1938, also made certain modifications in the eligibility requirements and benefits under social insurance, this being an attempt to relate the amount of benefit to the period of the worker's service in the enterprise in which he is employed. The purpose is to raise labor efficiency by providing inducements to workers to remain in the same employment. A summary of the changes made by this decree will appear in a subsequent issue of the Monthly Labor Review.

Unemployed Youth

ECONOMIC CONDITION OF RURAL YOUTH

WIDESPREAD unemployment at the present time and decreasing opportunities for placement in the future are the conditions faced by rural youth according to a study by the Works Progress Administration.¹ Ultimate farm ownership which could be anticipated by farm youth under earlier conditions is becoming a more remote possibility, and in rural America, with the development of such industries as lumbering, mining and textiles in these areas, the trend in recent years has been toward dependence on wage work. "Any analysis of the economic situation of rural youth," the report states, "must recognize this trend as well as the traditional background both of the rural economic system and of the economic relationship between parents and children."

An appraisal of unemployment among rural youth must take into consideration the fact that family farm labor includes employables in the farm family who do not necessarily receive a stated wage, as well as gainful workers who have moved from cities to live with and help their families and relatives or to engage in subsistence farming. This definition of employment would include many young persons in relief families who were working on the home farm. It would also include a large number of surplus rural youth just above the relief level who were working at home with little or no pay because it was impossible to find work elsewhere.

In considering the opportunities of rural youth for obtaining economic security it must be remembered that this does not necessarily mean a job with wages but rather the possibility of attaining farm ownership or a satisfactory tenant status.

The report divides rural youth into three economic categories: Those gainfully and advantageously occupied or otherwise advantageously situated; those who have remained above the relief level but whose situation is precarious; and those who are at the relief level.

Employment and Income

Most of the unpaid family labor and a large part of the hired labor on farms is performed by young persons between the ages of 15 and

¹ Works Progress Administration. Division of Social Research. Rural youth: Their situation and prospects, by Bruce L. Melvin and Elna N. Smith. Washington, 1938. (Research Monograph XV.)

24. In 1930, over 95 percent of all the young men 15 to 19 years of age and over 70 percent of those 20 to 24 years of age listed in the Census as agricultural workers belonged to one or the other of these groups. Of a total of 9,562,059 male and 909,939 female workers in agriculture, there were 1,184,784 male and 475,008 female workers of all ages in the unpaid family group; approximately 12 percent of all male workers and 52 percent of the female workers were employed without pay.

The low earnings of agricultural workers and therefore of farm youth (since they form such a large proportion of all farm laborers) are shown by different studies. The average annual earnings among male agricultural workers in 11 counties studied in 1936 ranged from \$178 among Negro cotton pickers in Louisiana and \$125 among white workers in a Tennessee county to \$347 among white laborers in Pennsylvania and \$748 among orientals in Placer County, Calif. In some cases board and lodging were furnished in addition to wages, but not in a large proportion of the cases. That only a small proportion of farm boys have an agreement with their fathers as to the payment for their work is shown by an Iowa study made in 1934. Of 1,107 out-of-school farm youth only 286 reported that they received wages for work performed by them. An example of the extent of unemployment among the rural youth during the depression years is shown by a county in New York in which only 42 percent of the unmarried rural youths aged 15 to 29 who were not in school had full-time employment in 1935 and 30 percent were completely unemployed or working only occasionally. On the farms of the county 21 percent of the young men were unemployed. Of the total employed in both villages and open country the principal occupations, in the order of their importance, were those of farm laborers, unskilled laborers, and skilled mechanics. The average weekly earnings of the entire employed group were \$13. Of 110 married young men in the same county, 81 percent were employed full time and had average weekly earnings of \$18, but 21 percent received less than \$15 a week. The average cash income of 282 single rural young men and women in 5 Connecticut townships was \$221 for the 12 months ending in the spring of 1934, ranging from an average of \$112 for those aged 16 to 17 years to \$378 for those 21 to 25 years of age. Many of this group had board, lodging, and clothing provided in addition to wages.

A recent survey of unmarried young persons in Arkansas, Maryland, Iowa, Utah, and Oregon by the Department of Agriculture showed that only 26 percent were not dependent on their father's farm for employment, 36 percent were either operating the home farm or replacing a hired man, and 38 percent were dependent on the home farm but if needed at all were employed only at seasonal labor.

Other local studies show the same high percentages either entirely unemployed or not self-supporting.

The increase in the number of young persons in rural areas, especially on farms, between 1930 and 1935, was due, in addition to the normal population increase, to the checking of the movement toward the cities which characterized the decade between 1920 and 1930. The great increase of youth in rural territory was due largely to this "piling up" process on the land, and the low incomes among these young people are, in part at least, a result of this process. In sub-marginal land areas this effect is intensified although even on good land the effect on economic opportunities of the surplus of young persons is evident.

The various studies show that rural young persons were receiving little return when working at home and had few opportunities to work away from home.

The situation of young women who have been forced to remain at home is even more precarious than that of the young men. The traditional job of these young women is housework or farm labor, although the villages do offer some employment opportunities. Young women are even more dependent on the generosity of their parents than are young men. One study in Wisconsin showed that 65 percent of the girls depended upon their parents for spending money and only 20 percent were economically independent. In the tobacco and cotton farm families of the South the position of the young women in the family is that of an unpaid servant.

Youth on Relief

The number of rural youth in relief families reached its peak in 1935 when about 1,370,000 young persons, or 14 percent of all rural youth, were receiving aid. By October of that year the number had declined to approximately 625,000. This reduction was due in the main to the expansion of the Civilian Conservation Corps and to the transfer of rehabilitation families from the Federal Emergency Relief Administration to the Resettlement Administration and did not mean that any large number had secured employment. From February 1935 to October 1935 there was an increase in the relative proportion of young women on relief, as the C. C. C. and most agricultural and other work opportunities were open only to young men. During the same period there was greater concentration in the age group 16 to 19 years than in the age group 20 to 24 years, as such opportunities were more generally available to the older age group. In relief families less than one-half of the young men and slightly more than one-tenth of the young women had some employment, chiefly as farm laborers, domestic servants, and unskilled laborers. Although a larger proportion of rural youth in relief families than of

urban youth had had work experience, this was of such a limited nature that it qualified them only for lower-paid jobs.

Employment Opportunities

In the past, rural youth could look forward ultimately to farm ownership, starting first as a farm laborer, becoming a tenant, and then owning a farm, but several factors have combined to make this progress more and more difficult. These include the growing burden of debt on the farms, increase in tenancy, decreased demand for farm laborers, the trend toward large-scale ownership of land, the mechanization of agriculture, and the development of areas of general agricultural maladjustment.

Ownership of the land they cultivate is steadily being lost by the farmers of the country, the equity of farm operators having dropped from 54 percent of the value of all farm real estate in 1900 to 42 percent in 1930. It is probable that this equity was still less in 1935. The average in 1930 ranged from less than 30 percent in Illinois, Iowa, and South Dakota to over 70 percent in Maine, New Hampshire, and West Virginia. The farmers are burdened with both long-term and short-term debts. The latter bear very heavy interest, the interest rates charged in the South, according to a study in 1936, ranging from 10 percent on Government loans to 15 percent on bank loans, and 16 percent on merchant accounts, with still higher rates for tenants and share-croppers.

The proportion of tenants increased from 25 percent of all farmers in 1880 to 42 percent in 1935. A permanent tenant class is developing from which relatively few are able to rise to ownership of the land. This increase is quite general throughout the country but is especially marked in certain sections of the South, such as the Mississippi Delta where the proportion of tenancy is 90 percent; the Red River Bottoms, 80 percent; and the Black Belt, 73 percent. The problem of tenancy was becoming serious even before the depression, as the length of time in which a farmer was able to pass from the status of tenant to owner had been lengthening for several decades. An even greater difficulty is encountered by farm laborers in becoming tenants, a fact of great importance to rural youth since they usually have to start in that position. During the depression the total number of farm laborers, including both wage hands and unpaid family workers increased from 4,393,000 in April 1930 to an estimated 5,919,000 in January 1935. During this period the number of hired laborers decreased rapidly because of lessened demand, and in 1935 it was estimated there were only about 1,646,000 hired workers whereas unpaid family workers had increased to 4,273,000. Individual ownership of the land has also been affected by the trend toward corporate ownership which in

some sections, such as Iowa, Montana, and in the South, has reached very large proportions.

Increased mechanization has eliminated the need for large numbers of laborers, both members of the family and paid workers. In 1930 there were about 920,000 tractors on farms and by 1935 this number had increased to about 1,175,000. The increased use of mechanical power had resulted in a 23-percent increase of the agricultural output per worker from 1919 to 1929, and in 1933 in the wheat-producing areas of the Great Plains only about 25 percent as much man labor was required to produce 1 acre of wheat as in 1919. Since the demand for food products is fairly stable there can be little expansion in the demand for agricultural products, unless there is a large increase in their industrial use. With the present tendencies unchecked, the report states, there are only three courses that seem to be open to agricultural laborers. These are: To remain on the land with a low level of living; to go to cities, usually to work at very low wages; or to go on relief or take jobs provided by one of the governmental agencies.

Agricultural maladjustment is found in six extensive rural areas. These are the Appalachian-Ozark, the Lake States Cut-Over, the Spring Wheat, the Winter Wheat, the Western Cotton, and the Eastern Cotton regions. The first of these represents an extreme in maladjustment. Already overpopulated in 1930, particularly on submarginal land, there was a migration to the land in the earlier years of the depression while many persons in other occupations turned to farming. The problems of the region are caused mainly by overpopulation in relation to present economic opportunities. The Cotton Belt is an area of disorganized agriculture with an excess of population. It has been estimated that nearly 3 million young persons matured into the age group 15 to 25 years between 1930 and 1935 in the rural districts of 11 Southern States. Of this number about a quarter of a million are being cared for mainly on subsistence farms. In the other areas exhaustion of the land and drought conditions, together with a turning to the land of persons previously engaged in nonagricultural occupations, have resulted in intensive distress.

The proportion of youth in relief families in these areas is generally high. In addition there is a mass of young people in marginal families, some on good land, more on poor land, but all continually on the borderline of distress. This large number of marginal youth is an impelling force operating to cause the spread of areas of maladjustment. Under present conditions the farm population of America is already above the maximum needed for maintenance of the agricultural output. Hence, unless unusual demands for labor develop in the cities, more and more rural youth may look forward to living only on a self-sufficing basis.

Possibilities of Employment Outside of Agriculture

If the excess number of rural youth is to be absorbed outside of agriculture, employment for approximately 1,400,000 more rural youth

will have to be found in 1940 than in 1930. However, the employment situation for young persons in other than rural areas is also serious. Studies in Detroit, Denver, and New York City show a high percentage of unemployment among young persons out of school. These young persons have to compete with those in the older age groups, and it has been the experience of the United States Employment Service that it is more difficult to place the young than the older persons. For example, for the year ending July 1, 1936, young persons under 25 years of age constituted 34 percent of all applicants but only 21 percent of all persons placed. Among these young persons seeking employment applicants with past experience in agriculture, forestry, and fishing formed the largest segment.

The increasing advance of technology affects rural young persons both on the farm and in industry. In recent years the introduction of new or improved machines has not been accompanied by increased employment. In 1935 the volume of total employment was 18 percent below the 1920 level, but the volume of production was 14 percent higher. The restriction in the number needed to produce manufactured goods is further shown by the fact that whereas in the third decade of this century production in the manufacturing industries increased about 40 percent, the number employed decreased about 2 percent from 1919 to 1929. Although over a period of time there are changes in the relative importance of different products and different industries and changes in the labor requirements, for the present, at least, the manufacturing field is not absorbing an increasing number of rural youth.

The largest group of unemployed young persons in the urban population is concentrated in the group below the age of 20. According to a study of workers on relief made in March 1935, 49 percent of all urban workers 20 years of age and under were inexperienced, as compared with 14 percent of those aged 21 to 24 years. Since young persons form a large proportion of the migrants from rural to urban areas it is evident that such migrants are likely to find the labor market already glutted with young persons of their own age. Employment opportunities were improved in the cities prior to the business recession of 1937-38, but the director of the National Youth Administration for the State of Illinois found that while there was a limited opportunity for work in the service fields and in factories, employment was more certain for those young persons who were willing to perform hard physical labor.

In conclusion, it is stated that "even with a substantial increase in urban employment it is doubtful if there will be a demand for workers approaching the available supply. Faced with restricted opportunities in urban areas rural youth can no longer solve their economic problems by leaving the village or the farm."

Negro in Industry

CONFERENCE ON PROBLEMS OF THE NEGRO AND NEGRO YOUTH

SOME progress in employment opportunities and in educational, recreational, health, and housing facilities for Negroes, was reported at the Second National Conference on Problems of the Negro and Negro Youth, held in Washington, D. C., January 12-14, 1939, under the auspices of the National Youth Administration. The purpose of the meeting was to review the progress made since the 1937 conference, and to make recommendations for solving basic problems through formulation of objectives and policies, for the advantage of Negroes, which can be accomplished in whole or in part by the executive and legislative branches of the Federal Government.¹

The agenda included the subjects: Youth and its problems, health and housing, education and recreation, social and economic opportunity, farm tenancy, and public employment.

The opening address was made by Aubrey Williams, Administrator of the National Youth Administration. Mrs. Mary McLeod Bethune, Director of the Division of Negro Affairs of that administration, was chairman of the sessions. Among the speakers were Mrs. Franklin D. Roosevelt and various officials and representatives of Government and private agencies interested in the problems under discussion. Negroes holding policy-making positions under the Federal Government served as consultants to the several reporting committees. In a brief statement based on reports submitted to the Conference by the four evaluation committees, the chairman announced that it was "apparent that there have been specific gains, some of them as the result of certain procedures and actions taken by the Federal Government." Among the significant gains noted was the expanding opportunity for employment and economic security resulting from the Federal relief program of such Government agencies as the Works Progress Administration, the National Youth Administration, and the Public Works Administration. Negroes, "who in the field of private industry are proverbially the 'last hired and the first fired' found some recognition" of their "intense and pressing needs for wider work opportunity." Attention was called to the widening of the horizon of Negro youth through greater educational and recrea-

¹ U. S. National Youth Administration. Second National Conference on Problems of the Negro and Negro Youth, Washington, D. C., January 12-14, 1939. Press releases Nos. 6-307, 13977-A, 13987, and 14027.

tional facilities. Such programs as adult education under the Works Progress Administration, student aid under the National Youth Administration, and the vocational training offered in the Civilian Conservation Corps have made training available to thousands of Negroes. More healthful housing and living conditions were reported under the Federal housing schemes, and new stability in family life through Social Security benefits and welfare services such as those of the Children's Bureau. The Farm Security and Farm Credit programs were declared to hold out hope and guidance for Negro farm tenants.

The chairman also commended the stand taken by the President's Advisory Committee on Education on "definite legislative guaranty for equitable Negro participation in the expenditure of Federal funds for education," and the recent ruling of the United States Supreme Court (59 Sup. Ct. 232) that a Negro petitioner was entitled "to be admitted to the law school of the State (Missouri) University in the absence of other and proper provision for his legal training within the State."

Immediate Needs

Reviewing in brief the various recommendations submitted in connection with the problem of Negroes, the chairman listed the following needs as immediate:

- Federal anti-lynching legislation.
- Elimination of discrimination in Federal Civil Service.
- Unrestricted use of the ballot.
- Continuation of an adequate and federally administered work-relief program.
- An expanded low-rent housing program.
- Extension of Social Security benefits to agricultural and domestic workers.
- Participation in the program of the Federal Housing Administration.
- Additional policy-making positions.
- Equitable participation in the George-Deen Act for industrial education.
- Full participation in the apprenticeship-training and vocational-guidance program.
- A national health program.
- Continuation and extension of youth-service programs.

Education and Training

NATIONAL OCCUPATIONAL INFORMATION AND GUIDANCE SERVICE

THE establishment in the United States Office of Education of a new Occupational Information and Guidance Service has been announced by the United States Commissioner of Education, who states that his office "has long been interested in this field of service, but not until this year have funds been available to finance it."

In an article in the November 1938 issue of *Occupations*—the Vocational Guidance Magazine (New York), the Commissioner explains that, although this service must emphasize as its prime objective the promotion of guidance with a view to the individual's making a living, the interpretation of guidance must never be narrow.

The new agency has received an impetus from the cooperation of the National Occupational Conference, not only through the counsel of its director, but by the allotment over a 3-year period of a sum of money to initiate certain activities more rapidly than would otherwise be possible with the Federal funds already appropriated.

For the current year, besides the assignment of Harry A. Jager as chief of the service, two specialists in occupational information, one specialist in tests and measurements, and two specialists in field service—one a woman—have been appointed. The staff has also been supplemented by various authorities.

The proposed development of the Service will follow three main lines. The first is the collation and dissemination of information about occupations. The second concerns a permanent, cumulative inventory of the individual who is to pursue one of these occupations. The third is the promotion throughout the Nation of the consciousness of the need of occupational information and general guidance as an integral part of school programs. It is clear that future progress involves also the encouragement of the development of personnel and organization for counseling services in State departments of education, local school systems, and in individual school units, so that they may function in helping youth and adults, in school and out, to make better decisions about ways of making a living and about other personal problems.

In the judgment of the Commissioner of Education, the future of the guidance movement depends to a considerable extent on the availability of Federal funds under the Smith-Hughes and George-Deen Acts for the salaries and expenses requisite to maintain State-supervised programs of occupational information and guidance.

In concluding his announcement, the Commissioner of Education states that "the emphasis of the Service will be placed upon cooperation with State and local authorities in making occupational information and guidance really function in the education of boys and girls, youths and adults, in city and country."



NYA STUDENT AID, 1938-39

IN THE academic year 1938-39, the National Youth Administration's college and graduate aid program is reaching 13½ percent more young persons than during 1937-38, according to an announcement made in January by the Administrator.¹ This expansion has been made possible through a more substantial appropriation received by the National Youth Administration under the Emergency Relief Appropriation Act of 1938.

The student quotas assigned to colleges and universities were on the basis of 9.3 percent of the total enrollment (as of October 1, 1936) of resident graduate and undergraduate students in the age group 16 to 24 inclusive. For 1938-39 the quota for the whole country is 87,969, or 11,976 more than in 1937-38.

The average monthly aid for college students is limited to \$15 and for graduate students to \$30. However, since the applications for this assistance greatly exceed the number of those who can receive aid, the average payment has been reduced in order to help as many students as possible. In November 1938, preliminary figures indicated that the average wage paid by the National Youth Administration to 112,984 college and graduate students was \$12.11 per month. The allowance for undergraduates averaged \$11.94; for the graduate students, \$17.98.

The allotted funds for college and graduate aid for the academic year 1938-39 totaled \$11,849,760. These allocations to the States are ordinarily made on a monthly basis over a period of 9 months, although sometimes the period is 8 months. The monthly allocations for 1938-39 to all States, the District of Columbia, Alaska, Hawaii, and Puerto Rico, amounted to \$1,318,192.

A supplement of \$100,000 to the regular allotment to the fund for college and graduate aid was designated for the assistance of Negro college and graduate students residing in those States having only limited higher educational facilities for Negroes. This fund will make it possible for 539 Negro students to earn on an average \$20.60 per month. The majority of this number will be graduate students.

¹ U. S. National Youth Administration. Press release No. 6-313, Washington, D. C., January 20, 1939.

Housing Conditions

CHARACTERISTICS OF URBAN HOUSING, 1933 TO 1936

A REPORT recently issued by the Works Progress Administration makes available comprehensive information on the physical and financial characteristics of the dwellings of over two-fifths of the urban population.¹ This report gives data for 203 cities, of which material for 64 cities was contained in the Federal real property inventory made by the Bureau of Foreign and Domestic Commerce in cooperation with other governmental agencies during 1933-34.² Recognition of the value of the earlier study led to demands for extending the coverage to other cities. In the additional surveys, locally sponsored but conducted under the same general procedure, bringing the total coverage to 203 cities, the technique was altered from time to time, so that the final figures for various surveys and their subdivisions are not strictly comparable on all points.

Of the 8,375,397 dwelling units included in the investigation, 33.3 percent were owner occupied, 58.1 percent were occupied by tenants, and 8.6 percent were vacant. Of the 5,097,523 analyzed with respect to condition of the structures, 39.0 percent were in good condition, 44.8 percent needed minor repairs, 13.9 percent needed major repairs, and 2.3 percent were unfit for use. The proportion of total dwellings in good condition ranged from 58.3 percent of the total in Allegheny County, Pa., Philadelphia, Pa., Washington, D. C., and Stamford, Conn., taken as a group, to 16.3 percent for 32 New Jersey localities each having a population of at least 25,000 persons.

Since a variety of factors contribute to substandard housing, it is difficult to set a precise and rigid definition of good or bad conditions. However, absence of sanitary facilities, unsafe condition of the physical structure of the dwelling, overcrowding, and the presence of more than one family in a unit designed for a single family are important and were therefore investigated.

Of the dwelling units covered by this survey, 15 percent either had no toilet facilities or shared their use with one or more other households; in the Southeast the percentage lacking flush toilets was 32, in

¹ U. S. Works Progress Administration. Division of Social Research. *Urban Housing—a Summary of Real Property Inventories Conducted as Work Projects, 1934-36*. Washington, 1938.

² For a summary of the findings of the Bureau of Foreign and Domestic Commerce survey, see *Monthly Labor Review*, March 1935 (p. 723).

the Southwest 25, in the Northwest 19, and in the Northeast 12. Installed bathing facilities were even less common, as 19.9 percent of the households either had no such facilities or shared them with others. Conditions in the southeastern cities were worse than in other localities, with over two-fifths of the dwelling units having no private baths or showers. Only 5 percent of the total dwelling units were without running water, but in southern cities the proportion was about 15 percent. In some cities in which running water was installed it was not used for either of the foregoing facilities.

Central heating equipment was lacking in over 40 percent of the homes. The range was from 32 percent in the northeastern to 94 percent in the southwestern region. The lack of equipment in the warmer sections of the country is not believed to be entirely due to climatic conditions making heated houses less essential.

Indication of social rather than physical conditions is given in the statistics showing that 17 percent of all the occupied dwelling units housed more than one person per room, and that about 5 percent of the families were living as extra families in units which already housed a primary family. Overcrowding, as measured by the standard of one person per room, ranged from 15 percent in two northern regions to about 25 percent in southern regions. "Doubling up" varied from 4 percent in New York City to 9 percent in two southern areas.

Outside of New York City the typical house was a single-family wood structure. Such dwellings represented four-fifths of the total, except in the Northeast where they formed 72 percent of the total and in New York City where only 43 percent were single-family houses. The distribution based on number of dwelling units rather than structures is somewhat different. For all regions exclusive of New York City, 57 percent of the dwelling units were single-family houses and 18 percent were multifamily structures housing three or more families. In New York City, which exemplifies extreme concentration of population, only 12 percent of the dwelling units were in single-family houses.

Larger homes were found in the Northeast, exclusive of New York City, than elsewhere. Almost half of the units in the Northeast had six rooms or more, as compared with one-third in the Southeast and Northwest, and only one-fourth in the Southwest and in New York City. One-story structures were commonest, except in the Northeast, where 15 percent were one-story buildings, as compared with over 50 percent in each of the other regions.

Wood exteriors predominated outside of New York City, ranging from 64.7 percent of the total in the Northeast to 81.9 percent in the Southeast. Brick was used for 29.9 percent of the structures in the Northeast, and stucco for 27.7 percent in California.

Over half of the units were built before 1915 and nearly one-fourth before 1895. The northeastern cities had the largest proportion of

those built before 1915, and the smallest proportion, 31 percent, was in the Southwest. New York City had unusually large proportions of the oldest and of comparatively new buildings.

Owners were occupying two-fifths of all occupied units except in New York City. Owner occupancy ranged from one-third in the Southeast to over one-half in the Northwest. Basing the conclusions on two kinds of facilities—toilets and bathtubs—the owner-occupied units were better equipped than were those occupied by tenants. White families more frequently owned their homes than did those of other races. Owners tended to occupy their homes longer than tenants. Four-fifths of the owner-occupied units had been occupied for 5 years or more, as compared with 18 percent in case of the tenant-occupied units. Forty percent of the tenants had been less than a year in their present dwellings.

Vacant dwellings made up 8 percent of the total. They were less well equipped in general than occupied dwellings and in greater need of repair. For example, two-fifths of all units were in "good" condition as compared with one-quarter of the vacant units. Over one-third of the vacant units had been idle for a year or more, but in the West the proportion was smaller. Mobility was greater among tenants in the Southwest than elsewhere, as less than one-fifth of the vacant units had been unoccupied as long as a year and two-thirds had been vacant less than 6 months.

As this study was made during a period of depression, business conditions must be taken into account in interpreting financial statistics. About 65 percent of the single-family owner-occupied structures outside of New York City were valued at less than \$5,000, and only 8 percent were valued at \$10,000 or more. Nearly one-fifth of the structures were valued at less than \$2,000, the range being from one-tenth in the Northeast to over one-third in the South. Over half of the single-family owner-occupied structures were mortgaged. The highest proportion of mortgaged houses was in the Northeast.

The monthly rent for about half the rental-dwelling units was below \$25. In New York City, the average rental was between \$30 and \$40, and in the Southeast over 70 percent of the monthly rentals were under \$20. In computing rentals, interviewers included estimates of rent levels for vacant dwellings.



INTERNATIONAL COMPARISON OF RENTS

RENTS in 62 cities, located in 19 countries, are compared in the latest of a series of studies on this subject undertaken by the International

Labor Office.¹ Earlier investigations established methods of measuring the quality of housing and a system of rating dwellings according to floor space, equipment, and privacy, and also gave some information on the actual cost of rent in selected cities.² The object of these inquiries is to make accurate data available on rental costs for use in international cost-of-living comparisons.

The study reviewed here covers late 1936 and early 1937. The statistics relate to rents of dwellings of the kinds usually occupied by workers in the respective countries. Rates are given in the national currencies of these countries and are also converted into Swiss francs at the average exchange rates for December 1936. Monthly rentals per dwelling, per room, and per square meter of living-room space are shown, supplemented by information on total floor space.

A dwelling was defined as a separate architectural unit composed of one or more rooms intended for the occupancy of a single family. A room in general was defined as a bedroom, sitting room, or kitchen, unless the kitchen was too small to be used as a living room. Bathrooms, pantries, passages, porches, and attics were excluded from the room count. Rent was taken to mean the net cost of rental plus such items as charges for upkeep of passages, removal of refuse, and fire insurance, but not the cost of heat and light. It was necessary to depart from the exact definitions in some cases to allow for local customs in the use of living space.

In order to obtain rents for workmen's dwellings, choices were made from data of the different countries. For example, where the available statistics were averages covering all kinds of housing, figures were specially computed by the cooperating governments for districts where homes of workers predominated. For other countries the rents used were sometimes those for small houses, which were accepted as an approximate indication of workers' rents. Systems of rent control in effect in some countries raised difficulties, since rents for comparable dwellings in the same town might vary depending upon whether or not they were subject to control. Where weights could be given to the controlled and uncontrolled rents an average was computed; otherwise rents for the two groups were calculated separately.

The International Labor Office has classified dwelling units in four groups according to comfort, amenities, and sanitation, as follows:

A. Dwellings with private bathrooms and toilet and running water within the dwelling.

B. Dwellings without private bathrooms, with private toilet and running water within the dwelling.

¹ Data are from *International Labor Review*, December 1938, pp. 840-861.

² See *Monthly Labor Review*, March 1937, pp. 628-630, for a discussion of the methods.

C. Dwellings with shared toilet (in multiple houses; on the same floor) and running water within the dwelling or on the same floor.

D. Dwellings in multiple dwelling houses with toilet in yard and water supply in common outside the dwellings.

The assumption of those making this study was that dwellings that are good, average, or poor with reference to the standards listed, will also fall in these respective categories as to heat, light, ventilation, etc. Although heating and lighting systems provide an indication of the standard of comfort, they have not been taken into account in this survey, owing to the great variation in the requirements under different climatic conditions.

Floor space was taken into consideration, as it was believed that the number of rooms in a dwelling is not, by itself, a measure of the adequacy of the accommodations. Rooms may be sufficiently large in some countries to provide as much space in a two-room suite as in one of three or four rooms elsewhere. An attempt was made to collect data on the normal floor space of dwellings of different sizes and standards of quality in order to be able to calculate the rent per square meter. Floor space, however, might be defined as including only the area of the main rooms of the dwelling, exclusive of passage, bath-rooms, etc., or as including these additional spaces. Either interpretation is justified, but the living rooms are the decisive factor making for the comfort and amenity of the family, and the narrower definition was therefore adopted.

The monthly rental rates (in Swiss francs) of workers' dwellings, classified by number of rooms, in 15 countries are shown in the following table. These statistics cover only dwellings of standard A, which have running water and private bathroom and toilet.

Monthly Rent (in Swiss Francs) Paid for Workers' Dwellings, in 15 Different Countries, 1936-37

[Average exchange rate of franc in December 1936=22.985 cents]

Country and town	Monthly rent (in Swiss francs) of dwellings with specified number of rooms					
	1	2	3	4	5	6
Australia:						
Melbourne.....	(1)	1 50.60	(1)	65.65	80.35	94.75
Sydney.....	(1)	1 54.00	(1)	71.75	83.40	95.10
Austria: Graz.....		29.35	54.90			
Canada:						
Halifax.....			46.75-68.75	69.20-91.20	91.85-135.85	105.30-149.30
Montreal.....			37.60-55.20	65.25-82.85	70.05-92.05	84.50-128.50
Ottawa.....			39.60-66.00	57.20-88.00	74.80-105.60	88.00-132.00
Toronto.....			47.20-91.20	69.20-113.20	91.65-135.65	113.90-153.50
Vancouver.....			70.40	88.00	96.80	101.20
Winnipeg.....				68.95-90.95	91.65-135.65	101.20-145.20
Denmark: Copenhagen.....					1 64.30	1 87.90
United States:						
Chicago 1.....	(1)	1 134.10	130.70	127.15	153.55	172.90
Denver 1.....	(1)	1 91.50	116.15	111.30	139.50	150.90
Los Angeles 1.....	(1)	1 96.35	116.00	147.40	172.50	192.50
New York 1.....	(1)	1 149.40	150.05	157.10	165.90	203.70
Philadelphia 1.....	(1)	1 121.00	127.40	132.55	119.70	127.60

See footnotes at end of table.

Monthly Rent (in Swiss Francs) Paid for Workers' Dwellings, in 15 Different Countries
1936-37—Continued

Country and town	Monthly rent (in Swiss francs) of dwellings with specified number of rooms					
	1	2	3	4	5	6
France:						
Lille.....					42.00	
Paris ¹			58.35-78.35	75.00-82.00	100.00	
Great Britain:						
Birmingham ²				49.75	69.50	
Bristol ³				52.10	67.20	
Glasgow.....			61.40			
London ⁴			66.00	75.30	89.20	
Manchester and Salford.....			49.80	57.90	68.35	
Newcastle ⁵			49.80	56.75		
Hungary: Budapest.....		64.65	88.60	119.75	174.55	
Ireland:						
Cork.....				29.35	62.55	
Dublin:						
Flats.....	13.90	18.55	27.80	37.05		
Cottages.....		23.15	34.75	46.35		
Dundalk.....					47.90	
New Zealand:						
Auckland ¹²					64.50	79.00
Christchurch ¹²					62.95	79.60
Dunedin ¹²					64.50	86.40
Wellington ¹²					86.05	101.80
Netherlands:						
Amsterdam.....			83.15	91.95	129.90	
Rotterdam.....			50.40	50.95	60.25	
Utrecht.....				41.55-59.65	53.60-80.00	
Sweden:						
Göteborg.....		59.40	89.10			
Malmö.....		59.40	79.20			
Stockholm.....		79.20	113.85			
Switzerland:						
Basel.....			75.65	91.35	112.35	
Bern.....			88.35	125.85	163.35	
Zurich.....			90.00	110.00	135.00	
Czechoslovakia: Prague.....		33.10	57.00			
Union of South Africa: ¹⁶						
Bloemfontein ¹²			102.95	130.20	155.40	154.70
Cape Town ¹²			92.85	123.85	162.10	183.25
Durban ¹²			113.95	140.40	167.90	183.35
East London ¹²			108.75	130.95	153.80	165.10
Kimberley ¹²			60.85	76.40	98.35	116.20
Pietermaritzburg ¹²			88.75	114.65	135.45	158.15
Port Elizabeth ¹²			90.45	125.05	152.85	167.60
Pretoria ¹²			122.20	153.20	182.80	191.70
Witwatersrand ¹²			127.25	151.05	189.95	192.50

¹ Rental shown for 2 rooms covers 1-, 2-, or 3-room dwellings.

² An important proportion of the dwellings is of a lower standard.

³ A certain proportion of the dwellings is of a lower standard.

⁴ Based on samples of all dwellings of which the quality falls predominantly into standard A. It is probable that a high percentage of the wage earners have this or a higher standard. In New York and Chicago the predominant type of dwelling is the multiple dwelling house, while in other cities the family house containing 1 or a few families is predominant.

⁵ Rental shown for 2 rooms covers 1- or 2-room dwellings.

⁶ Private ownership.

⁷ Single-family dwellings in rows.

⁸ As given in the International Labor Office inquiry of 1935.

⁹ Mostly separate houses but including some tenements or flats.

¹⁰ Dwellings either in flats or in houses.

¹¹ A kitchenette or scullery (of from 2 to 5 square meters) is not included in the number of rooms.

¹² Data referring to all dwellings which may also be taken as representative of workers' dwellings, the workers' housing standard not being very different from those of the rest of the population. The dwellings are chiefly single-family houses consisting of a single floor, often of the "bungalow" type, with a small garden.

¹³ A kitchenette which can be used only for cooking food, of an area varying between 7 and 8 square meters, is usually included in the number of rooms.

¹⁴ Dwellings with central heating.

¹⁵ Average rents weighted according to number of dwellings covered and those not covered by the act protecting tenants.

¹⁶ Kitchen for colored servants not included in the number of rooms.

Cooperation

POSITION OF COOPERATIVES UNDER WAGE AND HOUR ACT

THE Fair Labor Standards Act provides no express exemption for cooperatives as such, according to the decision of the Wage and Hour Division, United States Department of Labor.¹ Many requests have been received by the Administrator for information regarding the status of employees of cooperatives, many of whom are shareholders in the association by which they are employed.

The Administrator's statement follows:

The question has been asked whether cooperatives are employers and members who work for them employees within the terms of the Fair Labor Standards Act. The term cooperative is used to describe various types of business organizations differing in form and method of operation. Accordingly, no statement can be made to cover all types of organizations calling themselves cooperatives. However, it may be said generally that no justification can be found for concluding that member-workers of cooperatives, otherwise covered, are not entitled to the benefits of the act.

Any doubt which exists must be based on the notion that cooperatives are, in effect, partnerships and that no employer-employee relationship exists between them and the members who work for them. Although it is possible that there may be "workers' " cooperatives in which the interests of the members as workers are in all respects the same as their interests as proprietors and in which the usual characteristics of the employer-employee relationship do not exist, and hence in which the worker-members would not be employees within the meaning of the act, it is to be noted that cooperatives are commonly separate entities in which the usual characteristics of the employer-employee relationship exist as between them and worker-members. Cooperatives are generally in the corporate form with interests distinct from those of their members. Though their workers may be stockholders, as workers they are subject to the usual control and discipline of the corporate employer; they work at the discretion of the cooperative's board of directors or other managerial body. Their concern, as workers, with wages, hours of work and other working conditions, is quite distinct from and may be much greater than their interest, as stockholders, in profits or dividends.

The Fair Labor Standards Act provides no express exemption in favor of cooperatives as do some other statutes, and the provisions in the act defining the employer-employee relationship cover the relation of the ordinary cooperative to its workers regardless of whether or not they are stockholders or members.

¹ U. S. Department of Labor. Wage and Hour Division. Release of January 11, 1939.

THE COOPERATIVES AND TVA

RURAL cooperative associations are of assistance to the Tennessee Valley Authority in carrying out certain phases of its program. The annual report of that agency ¹ points out that there are 19 cooperative associations which are distributing TVA electricity in rural areas; terracing is being done on a shared-cost basis with several soil-conservation associations; and a number of cooperative organizations have been formed to operate refrigeration units for rural communities, using the low-cost refrigerator developed jointly by the Authority and the University of Tennessee Engineering Experiment Station.

The experience of one association in the last-named group is cited. This was a Georgia association which installed a refrigerator costing \$650. Labor estimated at about \$150 was contributed by the members. Operating costs (electricity, interest, and depreciation) amounted to \$176. As it was estimated that gross savings in reduced losses from spoilage and waste, and in the provision of cheaper meats, aggregated about \$476, the net saving was estimated at about \$300, or 37 percent on the total investment, with the refrigerator operating at only 50 percent of capacity. During the 12 months ending October 31, 1937, the 61 member families stored 16,000 pounds of meat and other farm products.

Up to the year under review the TVA had rendered administrative assistance to three cooperatives with which it had contractual relations, but this assistance was terminated as the organizations became self-sufficient. These associations were Tennessee Valley Associated Cooperatives, formed in 1933 to reduce the relief burden in certain rural areas through cooperative processing and marketing of farm products; Southern Highlanders, Inc., a marketing organization for small producers of hand-craft articles, whose membership has grown to more than a thousand individuals and separate producing groups; and the Land O'The Sky Association, Inc., doing similar work for eight farm cooperatives engaged in canning and other activities.

The 19 electricity cooperatives, at the end of June 30, 1938, were operating 3,814 miles of rural line, had 20,911 customers (of whom 17,524 were residential customers), and had total residential electricity sales of \$892,757, or \$60.51 per customer. The report notes that the operation of the cooperatives was on the whole less profitable than that of the municipalities. This was attributed to differing characteristics of service, mainly a more scattered distribution of customers. Nevertheless, "four of the older organizations were strong in every way, having accumulated substantial consumers' earned equities."

Generally speaking, it seems reasonable to anticipate that all cooperatives will be operating on a profitable basis within relatively few years, since they were

¹ United States. Tennessee Valley Authority. Annual report for fiscal year ended June 30, 1938. Washington, 1938. 2 vols.

established only after careful surveys as to their financial feasibility, and most of them are still in the developmental period of operations.

On the whole, distribution operations by the municipalities and cooperative associations have proved financially successful. The 15 municipalities and 5 cooperative associations showing surpluses at the end of the year had accumulated consumers' earned equities of almost \$650,000, about 40 percent of this amount during the last fiscal year.

The financial report of the Authority indicates that 15 electricity cooperatives had long-term obligations to the Authority which at the end of June 1938 amounted to \$1,982,717.

Profit Sharing

COMPULSORY PROFIT SHARING IN VENEZUELA

COMPULSORY sharing of net profits by an industrial or commercial employer with his salaried and wage-earning employees, at rates ranging from 2.05 percent of annual earnings for those in small enterprises to 12.45 percent for those employed in large undertakings, was decreed in Venezuela on December 17, 1938,¹ based upon article 63 of the Labor Act of July 16, 1936.² Certain large agricultural, cattle raising, and fishing enterprises, in which industrial and commercial work predominate, are also subject to the provisions of the decree, but the employee's share in the profits is to be 50 percent of that to which he would be entitled in the other enterprises. The decree specifies that sharing in profits does not entitle the employees to share also in management.

Classification of Enterprises

For determination of the percentage of profits to be distributed, commercial and industrial enterprises are divided into four groups. Large enterprises are divided into two classes: Class A includes those employing 400 or more persons, as well as those employing a smaller number if they have capital of at least 1,000,000 bolívares; and class B includes those having from 200 to 400 employees, as well as those with a smaller number if they have capital of from 200,000 to 1,000,000 bolívares. Small enterprises are also divided into two classes: Class A including enterprises having 50 to 200 employees, as well as those employing fewer persons but having capital of 50,000 to 200,000 bolívares; and class B, enterprises habitually employing fewer than 50 persons and also those having less than 50,000 bolívares of capital.

Net Profits

Net profits for any year are those earned during the 12 months ending December 1, but an employee who has been hired or one who has withdrawn during the year is entitled to his proportion of the profits for the number of whole months of his employment. The net profits are found by deducting from the gross profits the general expenses of

¹ *Gaceta Oficial*, Caracas, December 17, 1938, pp. 120,667-120,669.

² International Labor Office, Geneva, Legislative Series—1936, Venezuela 2.

the establishment or enterprise; the interest, not greater than that current on the market, to which the capital is entitled; and amounts set apart for reserves or dividends, but these latter may not exceed 10 percent of the capital. The decree does not allow for balancing of years showing profits with those showing losses, nor may employers reduce the salaries they have been paying, because of the profit-sharing requirement.

Rate of Participation

The rates of participation, based upon the employee's earnings during the year, are as follows:

Large enterprises:	Percent
Class A -----	12.45
Class B -----	8.30
Small enterprises:	
Class A -----	4.15
Class B -----	2.05

Profits less than the required amount, or sufficient to cover only the percentages fixed in this decree, are to be distributed among the employees according to the above scale, each employee receiving an amount proportioned to his annual earnings. As previously noted, employees in agricultural, cattle raising, and fishing enterprises subject to the decree are to receive half rates.

Time and Mode of Payment

Half of the employee's share in the profits is to be paid to him during the 5 days preceding December 25 of each year, and the remaining 50 percent is to be deposited to his credit in his savings account in an approved Venezuelan bank, but employers who have already established a company savings fund or a cooperative may deposit the second 50 percent in these, subject to payment of interest. In certain emergencies, the employee may, with the approval of the labor inspector having jurisdiction, draw out 50 percent of the amount credited to him. When his connection with an enterprise ceases, the amounts to his credit may be transferred to some other place or institution, also with the approval of the labor inspector. In any case, after six annual payments have been deposited to his credit an employee may withdraw his savings. At the death of an employee, his heirs may at once receive the full amount of his savings. In January of each year the employer is required to furnish a report of the profits paid to employees by him, with proof of his statements. Controversies arising under the decree are to be heard in labor courts.

Retroactivity of the Decree

Notwithstanding the fact that the decree could not normally be effective before December 17, 1938 (the date of its publication in the *Gaceta Oficial*), the first payment is declared to be due for the period from December 1, 1937, to December 1, 1938. Sixty days, dating from December 20, 1938, are allowed for the employers to make a further retroactive payment, divided as above, for the time from July 16, 1936, the date of the Labor Act, to November 30, 1937. For this interval of slightly over 16 months, the payment is to be one-third of that to which employees are entitled for the year ending December 1, 1938.

Deposit of Payments

In an order of January 12, 1939, the Minister of Labor and Communications, who is in charge of the execution of the decree, designated 7 banking institutions in which the deposit of profit-sharing payments is to be made, with the rates of interest on these deposits which each is willing to pay.³ Of the 7 institutions, 2 do not pay interest, 2 pay 1 percent, 1 pays 2 percent, another pays 2 percent up to 5,000 bolivares and 1 percent up to 10,000 bolivares, and the seventh pays 2 percent up to 10,000 bolivares.

³ Report of Antonio C. Gonzales, American Minister at Caracas, January 14, 1939.

Health and Industrial Hygiene

MEDICAL CARE FOR LOW-INCOME FARM FAMILIES

THE Farm Security Administration, with the cooperation of State medical associations, has developed plans under which low-income farm families are being helped to obtain medical care at moderate cost. Such plans, in November 1938, covered more than 78,000 families in 20 States.¹ The provision of medical care is an outgrowth of the rehabilitation program covering more than 600,000 low-income and destitute farm families. As a lending agency, the Farm Security Administration found, quite apart from any humanitarian purposes, that a family in good health is a better credit risk than one in poor health and that good health is a necessary part of a family's economic rehabilitation.

The rehabilitation program is designed to assist relief families to become independent self-sustaining units and to this end loans are made, after plans have been worked out by trained agricultural and home-management supervisors with the farmers and their wives, for the operation of the farms and homes. Rehabilitation loans are made principally to enable the farmer to purchase farm equipment, livestock, fertilizer, seed, etc. The loans, carrying interest at 5 percent and secured by crop liens and mortgages on livestock, average about \$300. It has been the experience of the Administration that the loans are generally repaid. This credit is extended only to farmers who cannot obtain assistance elsewhere, and as they are what would be ordinarily rated as poor risks the Government's security is dependent upon their success, which in turn depends, in part, upon their being in good physical condition.

Provisions of Plans

The plans developed by the Farm Security Administration to provide medical care for its borrowers are put into effect only with the cooperation of the local medical societies. As a first step, an agreement is made with the State medical association, outlining the general principles acceptable to the association, after which the local medical

¹ Farm Security Administration. Medical-Care Plans for Low-Income Farm Families. Press release November 1, 1938.

societies in the areas most needing this service are approached for the purpose of working out the details of a plan for borrower families.

The plans, as agreed upon with the medical societies, provide that in general the total amount a borrower is to spend in a given period, usually one year, will be within the amount he is considered able to pay (as determined by the farm plan) and that the family shall have free choice of a physician. They also provide that the funds for the payment of medical costs and fees shall be paid to a trustee at the beginning of the period and may then be pooled into a common fund or credited to the individual families, according to the agreement reached by the local physicians and the families concerned. The amount paid by persons covered by the plans varies in the different localities but is usually between \$20 and \$30 per family per year. Where necessary, the Farm Security Administration will increase the size of its loan to a borrower in order that he may participate in the plan.

The plan which is in most general use provides that a part of the money shall be set aside for surgical cases, hospitalization, and emergency needs and that the remainder shall be divided into equal monthly allotments for the payment of medical fees for the period covered. Monthly statements are submitted by physicians for their services. If the allotment for the month is sufficient, all bills are paid in full and any balance is carried forward to the next month or to the end of the period. If the funds are not sufficient to pay the physicians' bills for the month, however, the allotment is prorated among the physicians, and any funds remaining from previous periods may either be used to complete payment of the bills for months in which funds were not adequate or be returned to the families, as the terms of the agreement may provide.

If the plan provides that a separate fund is to be kept for each family, the physician agrees to provide medical care for the period for the amount designated. If the actual cost of service rendered is less than the sum set aside, the balance is refunded to the family, but if it is greater the physician continues attendance during the period without additional compensation. This type of plan does not provide for hospitalization but sometimes it is varied to provide for pooling part of the payments from all families to meet hospitalization and emergencies.

The experience with the two types of plans has shown that for low-income families the pooled-fund plan is preferable, as it insures adequate care in cases of protracted and serious illness and protects the doctor from having to care for such cases without compensation.

Both plans have proved effective in the preventive aspects of medicine. Families which, because of inability to pay, would ordinarily postpone seeking medical attention until minor illnesses became chronic

or serious are able to have such care, while in many areas physicians who have previously served Farm Security Administration borrowers with little or no compensation are assured of reasonable payment. In both plans payment for medical care is based on the expected income of the family and the physicians use a uniform fee schedule as the basis for their charges. Since the incomes of these families range from \$20 to \$300 a year it is realized that they cannot pay heavy fees and the families generally realize that even though no medical attention may be needed in the year the security afforded is worth the investment. In general there is no abuse of the privilege in requesting unnecessary medical attention, and in the rare instances where such demands have been made the local representative of the Farm Security Administration has usually been able to adjust the matter. If he fails to do so, however, the family may be dropped from the program. Physicians, in general, are pleased with the program since families who were formerly unable to pay anything are now able to pay at least a part of the customary fees.

Extent of Prepayment Plans

County plans for medical care are in operation in 120 counties in the States of Alabama, Arkansas, Georgia, Iowa, Indiana, Missouri, Mississippi, Ohio, Oklahoma, Texas, and Tennessee. Agreements have been reached with the State medical associations in Colorado, Louisiana, New Mexico, North Carolina, North and South Dakota, Utah, Virginia, and Wisconsin.

A report, for the first 9 months of 1938, of a county medical plan in 1 of the Southern States covers 304 families paying an average of approximately \$26 per year per family. The amount available in the medical fund was \$439.85 per month, or \$5,278.20 for the year. The bills presented for the 9-month period totaled \$5,316.44 of which \$3,945.93 had been paid. There was a surplus of \$12.72 in the first month but a deficit in each of the succeeding 8 months. The monthly payments on a pro-rata basis had ranged from 53 to 89 percent of the bills. The hospital fund for the year amounted to \$2,639.10 and the bills to \$1,769 of which \$1,549.69 was paid, the pro-rata monthly payments ranging from 67 to 100 percent of the total bill.

In North and South Dakota, because of the large number of families in need of help as a result of repeated droughts, State-wide programs were put into effect in November 1938. It was expected that a large proportion of the 77,000 families eligible in the 2 States would become members of the farmers' aid corporations. The fee charged was \$2 per month per family, to be used for emergency medical and dental care, emergency hospitalization, and for necessary drugs and medical supplies, and home nursing. This plan covers service only for acute

or emergency conditions. Charges are based on a special schedule of fees agreed upon by the interested organizations and a fixed proportion is set aside for the different services.

Medical prepayment plans have also been organized on a community basis. One such program, started in March 1938, is administered by the families themselves which pay annual membership dues of \$18 per family for general practitioner care. In several communities the homesteaders have organized voluntary beneficial associations which serve as the agencies for the conclusion of special agreements with physicians and hospitals. In still other cases the Farm Security Administration advances the money for medical care and the loans are repaid when the crops are sold.

With the exception of public health nurses placed in a number of the projects, the Farm Security Administration is avoiding subsidizing medical care as far as possible. The report states that as yet "there has not been sufficient experience with these various plans to perfect them. Adjustments and changes will be necessary. It is not felt that these programs are a final answer to all the problems of medical care in rural areas, but it is felt that they are worth-while examples of methods which may be used in approaching these problems."



CONGRESS ON INDUSTRIAL HEALTH

THE organization of a Council on Industrial Health was authorized at a meeting of the House of Delegates of the American Medical Association in 1937. It was decided by the members that a series of conferences should be held for the purpose of clarifying the objectives of the industrial health movement and the first annual congress was held accordingly in Chicago, January 9 and 10, 1939. The meeting was attended by approximately 250 leaders in industrial health work. The plans of the Council include an investigation of present activities in the field of industrial health, the objectives of this study being to outline problems of health in industry and to indicate what is being done about them. Another phase of the Council's plan for the advancement of industrial health is a stimulation of clinical discussions on industrial medical problems through the State and county medical organizations.¹

In his statement to the congress, Dr. Seeger, chairman of the Council, pointed out that there had been a lag among the rank and file of practising physicians who care for the great mass of industrial workers, in acquainting themselves with preventive and curative

¹ Data are from Journal of the American Medical Association (Chicago), January 21, 1939 (p. 241) and statement made to the Congress on Industrial Health by Dr. Stanley J. Seeger, chairman.

measures developed by medical and engineering experts in the field of industrial hygiene. This lag is due both to the rapid development of industry and to the failure of medical educational systems to stress the importance of industrial medicine and give it due importance in courses of study. "The implications of the development of industry and the change in the practice of medicine effected by workmen's compensation laws has not been sufficiently emphasized." Therefore, the practising physician must attempt to orient himself in this expanding field and must study the aims and accomplishments of the various organized agencies concerned with industrial health problems.

The program of this first conference was devoted to consideration of the points of view of organized medicine and of the principal professional, governmental, and nonmedical agencies responsible for the health of the working population.

In commenting editorially on the results of the conference, the *Journal of the American Medical Association* points out that industrial medicine has progressed greatly in the past quarter century and that within the profession a career in preventive industrial practice is being increasingly recognized as a worthy aim in itself. The conference furnished every indication, it is said, that lay organizations welcomed the opportunity to learn at first hand the attitude which organized medicine takes toward industrial practice.

Industrial Accidents

INDUSTRIAL INJURIES IN THE UNITED STATES DURING 1937

By MAX D. KOSSORIS and SWEN KJAER, *Bureau of Labor Statistics*

IN 1937 there were approximately 19,600 occupational deaths, 127,000 permanent injuries, and slightly less than 1,700,000 temporary injuries in the United States, according to estimates of the United States Bureau of Labor Statistics. These estimates covered not only workers, but also self-employed persons. For employed workers the estimates indicate 17,800 deaths, 111,900 permanent injuries, and 1,533,600 temporary disabilities, or a total of about 1,663,300. The total occupational injuries for the United States, including those to workers and self-employed proprietors, amounted to 1,838,000.

Mining and quarrying appears to have been the most hazardous of the industry groups studied. The ratio of 2,028 deaths for every million employees is the highest of any of the groups. The total of 115,048 disabilities per million employees in this industry indicates that, on the average, 1 out of every 8 employees was injured during the year. Construction ranked second, with approximately 1,048 fatalities per million employees, and, on the average, 1 out of every 8 employees injured during the year. Miscellaneous transportation, including busses, taxis, marine, and air transportation industries, ranked third in fatality ratio. Agriculture, which in the aggregate had more fatalities than any other single group, had 416 fatalities per million employees.

The 79 industries studied in the annual survey included more than 20,000 identical establishments for which figures were available for 1936 and 1937. These establishments had about $4\frac{1}{4}$ million employees during 1937 and a total exposure of nearly $8\frac{1}{2}$ billion employee-hours. The entire group experienced 898 deaths, 59 permanent total disabilities, 10,390 permanent partial disabilities, and 129,397 temporary total disabilities. The total time loss of 18,500,000 days averaged 4.3 days for every worker employed during the year. For the entire group surveyed, the average number of disabling injuries per million employee-hours worked increased slightly from 17.06 in 1936 to 17.19

in 1937, and the average days lost per thousand hours worked remained practically constant with 2.25 for 1936 and 2.26 for 1937.

Outstanding in 1937 for high frequency rates (that is, average number of disabling injuries per million employee-hours) were logging with a frequency rate of 116.11, sawmills with 63.06, pulp manufacturing with 51.64, fertilizer manufacturing with 41.59, and brick, tile, and terra-cotta manufacturing with 35.08. The frequency rate for logging was 8 percent in excess of that of 107.43 for 1936, and the rate for sawmills increased slightly as did that for fertilizers. On the other hand, the frequency rate for pulp manufacturing decreased from 60.56, and that for brick, tile, and terra cotta from 38.68.

Industries with low frequency rates were coke ovens with 4.21, cement with 4.87, women's clothing with 4.88, gas manufacturing with 5.78, tobacco products with 5.87, men's clothing with 6.02, explosives with 6.10, knit goods with 7.05, and electrical machinery, apparatus, and supplies with 7.80. The entire printing and publishing group showed low frequency rates, as did the laundry and dry cleaning group.

The survey revealed no definite relationship of industrial injuries to changes in employment. In some industries increases in employment were accompanied by increased frequency rates, while in others decreases in employment had the same effect. In still others, decreases in employment were accompanied by increases or decreases in the frequency rate. For instance, in the explosives industry, a 14.5 percent increase in employment was matched by a 10.8 percent decrease in the frequency rate. Cement had a similar experience, as had machine tools and pulp manufacturing. But a decrease of 1.7 percent in soap-manufacturing employment resulted in an increase of 51.9 percent in the frequency rate. In other industries, such as confectionery and logging, considerable increases in frequency rates were experienced with practically no changes in employment.

An analysis of the distribution of the types of injuries indicates that the cement industry had more fatalities per thousand injuries than any other industry. Its ratio of 68 fatalities per thousand injuries, however, appears to be due to the absence of minor injuries, inasmuch as the frequency rate for the industry is only 4.87. For the electric power and light industry, the fatality ratio dropped from 29 in 1936 to 17 in 1937, but for the miscellaneous utility groups, that is, establishments carrying on activities falling into more than one of the industries listed, the number of fatalities remained practically constant, with 33 in 1936 and 34 in 1937.

The individual reports of the cooperating establishments indicated clearly that a large percentage was able to go through the entire year with no or very few disabling injuries. On the other hand, other establishments with essentially the same hazards and in the same size group of employment had a considerable number of such disabilities.

As has been indicated in earlier surveys and special studies, the experiences of the establishments without injuries indicate beyond any doubt that most of the injuries reported could have been prevented. To establishments with injury experiences, the problem of safety is a constant challenge—but a challenge which can be met.

Estimates of Disabling Industrial Injuries During 1937

The data already referred to for the national experience are given in table 1. Footnotes indicate the degree of comprehensiveness of the information on which these estimates are based. It will be noted that for some of these industries the estimates were based on fragmentary data, while for others, such as manufacturing, mining, and railroads, the estimates are based on comprehensive information.

In contrast with the estimates for 1936, those for 1937 have been amplified to include self-employed proprietors as well as employed workers. The total of the two groups is the total of all occupational injuries. In two of the industries, however, it was impossible to make this segregation; thus, included in agriculture are self-employed farmers and family labor, and included in mining and quarrying are self-employed miners.

In the mining and quarrying group, anthracite and bituminous-coal mining together accounted for about 1,400 fatalities, and mining of metals (not including iron) accounted for an additional 160 deaths. In the public utilities group, the telephone and telegraph industry accounted for approximately 20 deaths, light, power, and gas utilities for about 150, and street railways for the remainder. The railroad group includes both steam and electric railroads. The miscellaneous transportation group includes trucking, taxicabs, busses, pipe lines, water shipping, and aircraft. The services and miscellaneous industries group includes finance, government, educational and professional employment, and the large group of miscellaneous services and industries not elsewhere classified.

TABLE 1.—*Estimated Number of Disabling Injuries During 1937*

Industry group	Number of injuries, by extent of disability					
	All disabilities			Death		
	Total	Employ-ees	Self-em-ployed	Total	Employ-ees	Self-em-ployed
All industries.....	1, 838, 000	1, 663, 300	174, 700	19, 600	17, 800	1, 800
Agriculture ¹	270, 500	² 270, 500	-----	4, 500	² 4, 500	-----
Mining and quarrying ³	107, 800	⁴ 107, 800	-----	1, 900	⁴ 1, 900	-----
Construction ¹	391, 700	⁵ 353, 300	38, 400	3, 700	⁵ 3, 300	400
Manufacturing ³	364, 400	354, 300	10, 100	2, 500	2, 300	200
Public utilities ³	16, 500	16, 500	-----	300	300	-----
Trade—wholesale and retail ¹	241, 200	191, 000	50, 200	2, 800	2, 200	600
Railroads ⁴	40, 100	40, 100	-----	800	800	-----
Miscellaneous transportation ⁷	42, 400	29, 200	13, 200	800	600	200
Services and miscellaneous industries ⁷	363, 400	⁸ 300, 600	62, 800	2, 300	⁸ 1, 900	400

See footnotes at end of table.

TABLE 1.—Estimated Number of Disabling Injuries During 1937—Continued

Industry group	Number of injuries, by extent of disability					
	Permanent			Temporary		
	Total	Employ- ees	Self-em- ployed	Total	Employ- ees	Self-em- ployed
All industries	126, 700	111, 900	14, 800	1, 691, 700	1, 533, 600	158, 100
Agriculture ¹	13, 500	² 13, 500	-----	252, 500	² 252, 500	-----
Mining and quarrying ¹	3, 300	⁴ 3, 300	-----	102, 600	⁴ 102, 600	-----
Construction ¹	20, 600	⁵ 18, 500	2, 100	367, 400	⁵ 331, 500	35, 900
Manufacturing ³	27, 900	27, 000	900	334, 000	325, 000	9, 000
Public utilities ³	700	700	-----	15, 500	15, 500	-----
Trade—wholesale and retail ¹	32, 000	25, 300	6, 700	206, 400	163, 500	42, 900
Railroads ⁶	1, 400	1, 400	-----	37, 900	37, 900	-----
Miscellaneous transportation ⁷	2, 200	1, 500	700	39, 400	27, 100	12, 300
Services and miscellaneous industries ⁷	25, 100	⁸ 20, 700	4, 400	336, 000	⁸ 278, 000	58, 000

¹ Based on fragmentary data.² Includes self-employed proprietors and family labor.³ Based on comprehensive survey.⁴ Includes self-employed proprietors.⁵ Includes W. P. A. projects.⁶ Based on Interstate Commerce Commission data.⁷ Based on small sample study.⁸ Includes C. C. C. projects.

Table 2 indicates the relative hazards of each of the industry groups by showing per million workers the number of fatalities, permanent, and temporary injuries.

TABLE 2.—Estimated Number of Industrial Injuries per Million Workers, by Industry Group and Type of Disability, 1937

Industry group	Extent of disability			
	Total	Fatal	Permanent	Temporary total
All industries	40, 159	430	2, 702	37, 027
Agriculture ¹	24, 978	416	1, 247	23, 315
Mining and quarrying (includes petroleum and natural gas) ²	115, 048	2, 028	3, 522	109, 498
Construction ¹	112, 230	1, 048	5, 877	105, 305
Manufacturing ²	36, 379	236	2, 772	33, 371
Public utilities ²	17, 591	320	746	16, 525
Trade—wholesale and retail ¹	29, 407	339	3, 895	25, 173
Railroads ³	34, 098	680	1, 190	32, 228
Miscellaneous transportation ⁴	36, 730	755	1, 887	34, 088
Services and miscellaneous industries ⁴	40, 842	258	2, 812	37, 772

¹ Based on fragmentary data.² Based on comprehensive survey.³ Based on Interstate Commerce Commission data.⁴ Based on small sample studies.

Survey Data

The entire group surveyed included 20,167 identical establishments for 1936 and 1937. The reason for using identical establishments was to maintain strict comparability in the exposure study in order to determine changes in the disabling-injury experience from 1936 to 1937. For the entire group, employment increased from 3,890,000 in 1936 to 4,294,000 in 1937. Similarly, the employee-hours worked increased from nearly 8 billion to nearly 8½ billion. The total number of disabling injuries increased from 130,573 to 140,744, resulting in a

relatively slight increase in the frequency rate (i. e. the average number of disabling injuries per million employee-hours worked) from 17.06 to 17.19. The severity rate, however, remained practically unchanged, with 2.25 and 2.26 respectively in 1936 and 1937. There was very little change in the total number of fatalities and permanent total disabilities. Permanent partial injuries increased by about 1,350, and temporary total disabilities by about 10,000.

For the total manufacturing group, with 18,112 identical establishments, employment increased from nearly 3½ million to slightly above 4 million. Similarly, employee-hours worked increased from 7½ billion to nearly 8 billion, and the total number of disabling injuries from nearly 126,000 to approximately 135,000. The resulting increase in the frequency rate from 17.81 to 17.82 was slight, as was the practically negligible increase in the severity rate from 2.30 to 2.31. The total time lost in 1937 amounted to 17,493,500 days, or approximately 4.3 days for each employee.

Logging experienced the highest frequency rate of 116.11, representing an 8.1 percent increase over the 1936 rate of 107.43. Sawmills, with the next highest frequency rate, 63.06, also experienced an increase over the frequency rate of 61.81 in 1936. The industries with low frequency rates have already been cited. It is pertinent here, however, to indicate that most of these industries experienced decreases from their 1936 rates. Additional groups to which attention is directed are the laundry and dry-cleaning establishments which show low rates in 1937 and in each instance a decrease over 1936.¹

TABLE 3.—*Injury Rates and Injuries by Extent of Disability for 20,167 Identical Establishments, 1936 and 1937*

1936

Industry	Number of establishments	Number of employees (in thousands)	Employee-hours (in millions)	Number of disabling injuries				Total time lost (days)	Frequency rate ¹	Severity rate ¹	
				Total	Resulting in—						
					Death	Permanent total disability	Permanent partial disability				Temporary total disability
All industries.....	20, 167	3, 890	7, 998	130, 573	881	58	9, 043	120, 591	16, 365, 410	² 17.06	² 2.25
<i>Manufacturing</i>											
Total, manufacturing....	18, 112	3, 664	7, 513	125, 722	805	52	8, 819	116, 046	15, 475, 713	² 17.81	² 2.30
Chemical products.....	1, 409	223	448	5, 631	81	8	459	5, 083	1, 119, 303	² 12.75	² 2.52
Druggist preparations.....	194	21	45	283	3	-----	20	260	46, 525	6. 29	1. 03
Explosives.....	32	7	13	92	7	-----	17	68	60, 332	6. 84	4. 48
Fertilizers.....	361	² 12	21	874	9	-----	21	844	101, 321	41. 45	4. 80
Paints and varnishes.....	357	19	41	560	9	-----	46	505	121, 400	13. 81	2. 99
Petroleum refining.....	95	58	110	1, 275	20	4	131	1, 120	289, 052	11. 59	2. 63

See footnotes at end of table.

¹ The data shown in table 3 are available also for individual States and will be furnished on request.

TABLE 3.—*Injury Rates and Injuries by Extent of Disability for 20,167 Identical Establishments, 1936 and 1937—Continued*

1936—Continued

Industry	Number of establishments	Number of employees (in thousands)	Employment-hours (in millions)	Number of disabling injuries				Total time lost (days)	Frequency rate ¹	Severity rate ¹
				Total	Resulting in—					
					Death	Permanent total disability	Permanent partial disability				Temporary total disability
<i>Manufacturing—Con.</i>										
<i>Chemical products—Con.</i>										
Rayon and allied products.....	14	22	44	429	1	26	402	43,850	9.67	0.99
Soap.....	72	16	32	254	2	2	37	68,650	8.02	2.17
Not elsewhere classified.....	284	68	141	1,864	30	2	161	388,173	13.18	2.74
<i>Food products.....</i>										
Baking.....	482	44	98	1,671	11	4	125	235,901	17.00	2.40
Canning and preserving.....	363	40	71	1,735	6	79	1,650	143,141	24.48	2.02
Confectionery.....	208	29	59	585	1	44	540	54,009	9.92	.92
Flour, feed, and other grain-mill products.....	535	30	66	1,614	17	3	86	248,239	24.47	3.76
Slaughtering and meat packing.....	187	108	239	6,404	26	1	404	644,706	26.76	2.69
Sugar refining.....	61	18	36	1,461	6	45	1,410	111,755	41.06	3.14
Not elsewhere classified.....	42	3	6	263		16	247	24,326	46.65	4.32
<i>Iron and steel and their products.....</i>										
Iron and steel.....	760	500	1,092	17,654	175	5	1,018	16,456	16.17	2.06
Hardware.....	350	52	110	1,672	3	2	166	1,501	15.13	1.49
Machine tools.....	162	24	55	819	4	48	767	72,129	14.86	1.31
Stamped and enameled ware.....	348	51	108	2,492	8	1	389	2,094	23.15	3.24
Steam fittings and apparatus.....	166	40	85	1,449	11	2	83	1,353	17.12	1.96
Stoves.....	139	26	54	1,651	8	1	97	1,545	30.63	3.00
Structural and ornamental iron work.....	232	9	19	780	3	2	74	701	41.82	7.21
Not elsewhere classified.....	35	9	20	163	1	1	21	140	8.22	1.18
<i>Leather and leather products.....</i>										
Leather.....	146	34	69	1,248	5	1	68	1,175	18.00	1.63
Boots and shoes.....	385	125	242	2,241	4	1	99	2,137	9.25	.65
Not elsewhere classified.....	19	2	4	82		4	78	5,739	18.39	1.29
<i>Lumber and lumber products.....</i>										
Logging.....	91	13	25	2,696	44	6	144	2,508	107.43	24.34
Planing mills.....	657	33	73	2,440	16	235	2,189	357,088	33.20	4.86
Sawmills.....	337	36	73	4,533	25	2	255	4,251	61.81	8.00
Furniture.....	743	93	198	3,837	9	441	3,387	491,119	19.36	2.48
Not elsewhere classified.....	373	33	69	4,064	26	4	266	3,768	59.14	8.70
<i>Machinery (not transportation).....</i>										
Agricultural implements.....	100	55	113	2,108	9	213	1,886	215,118	18.56	.89
Electrical machinery, apparatus, and supplies.....	263	179	365	3,175	22	1	378	2,774	8.69	1.31
Foundry and machine-shop products.....	1,247	129	275	7,998	31	3	556	7,408	29.12	3.09
Not elsewhere classified.....	1,070	149	319	6,391	38	5	524	5,824	20.04	2.35

See footnotes at end of table.

TABLE 3.—Injury Rates and Injuries by Extent of Disability for 20,167 Identical Establishments, 1936 and 1937—Continued

1936—Continued

Industry	Number of establishments	Number of employees (in thousands)	Em- ploy- ee- hours (in mil- lions)	Number of disabling injuries				Total time lost (days)	Fre- quen- cy rate ¹	Se- ver- ity rate ¹	
				Total	Resulting in—						
					Death	Perma- nent total disabil- ity	Perma- nent partial disabil- ity				Tempo- rary total disabil- ity
Manufacturing—Con.											
Paper and allied products.....	749	131	272	6,562	25	1	415	6,121	748,514	23.12	2.70
Pulp.....	15	2	4	225	1		21	203	42,890	60.56	11.55
Paper.....	114	28	60	1,764	6		77	1,681	157,202	29.57	2.64
Both paper and pulp.....	122	58	119	2,999	13	1	196	2,789	368,517	25.28	3.11
Folding boxes.....	176	18	38	834	1		51	782	84,915	21.72	2.21
Set-up boxes.....	245	15	30	320			35	285	36,620	10.83	1.24
Not elsewhere classified.....	77	11	22	420	4		35	381	58,364	18.80	2.61
Printing and publishing products.....	2,220	130	305	2,139	10	2	166	1,961	289,283	6.94	2.86
Book and job.....	1,416	57	157	1,009	4	1	87	917	137,158	6.43	.87
News and periodical.....	652	64	132	964	6		60	898	111,728	7.30	.85
Not elsewhere classified.....	152	8	16	166		1	19	146	40,397	10.08	2.45
Rubber and rubber products.....	52	89	165	2,183	16		97	2,070	218,031	12.14	2.21
Rubber tires.....	25	61	108	1,732	14		67	1,651	180,164	16.05	1.67
Rubber goods (other than tires).....	21	15	30	250	2		12	236	23,104	8.34	.77
Not elsewhere classified.....	6	13	27	201			18	183	14,763	7.54	.55
Stone, clay, and glass products.....	849	125	246	5,456	46	2	175	5,233	554,074	22.62	2.31
Brick, tile, and terra cotta.....	507	34	68	2,639	16		73	2,550	203,472	38.68	2.98
Cement.....	110	16	32	212	12		27	173	113,880	6.71	3.60
Glass.....	134	56	108	2,037	14	2	61	1,960	191,881	18.80	1.77
Pottery.....	71	16	33	465	4		8	453	37,330	14.15	1.14
Not elsewhere classified.....	27	2	5	103			6	97	7,511	22.46	1.64
Textile and textile-mill products.....	2,745	706	1,347	14,372	45	2	760	13,565	1,306,439	9.17	2.92
Carpets and rugs.....	24	18	33	300	2		42	256	61,809	8.99	1.85
Clothing, men's.....	406	63	109	625	5		27	593	74,424	5.73	.68
Clothing, women's.....	545	39	68	367	3		24	340	45,083	5.37	.66
Cotton goods.....	478	260	502	6,952	12	1	287	6,652	466,056	13.84	.93
Dyeing and finishing.....	164	31	64	923	4		66	853	115,510	14.34	1.79
Knit goods.....	592	133	252	1,503	4		54	1,445	81,860	5.96	.32
Silk and rayon products, not elsewhere classified.....	15	6	12	125			3	122	6,665	1.48	.56
Woolen goods.....	338	105	205	2,527	7	1	207	2,312	329,422	12.35	1.61
Not elsewhere classified.....	183	51	100	1,050	8		50	992	125,610	10.47	1.25
Transportation equipment.....	225	267	533	5,645	50	1	518	5,076	801,401	10.33	2.47
Motor vehicles.....	143	224	450	3,930	25	1	396	3,508	512,659	8.74	1.14
Shipbuilding.....	67	37	73	1,546	23		112	1,411	271,009	21.12	3.70
Not elsewhere classified.....	15	5	11	169	2		10	157	17,733	15.92	1.67
Miscellaneous manufacturing.....	362	127	253	2,508	23	2	351	2,132	455,729	10.54	2.59
Coke ovens.....	24	8	19	86	9		6	71	58,306	4.63	3.14
Tobacco products.....	202	43	82	484	1		41	442	49,790	5.93	.61
Radio and phonograph.....	58	44	83	542	1	1	85	455	67,940	6.53	.82

See footnotes at end of table.

TABLE 3.—*Injury Rates and Injuries by Extent of Disability for 20,167 Identical Establishments, 1936 and 1937—Continued*

1936—Continued

Industry	Number of establishments	Number of employees (in thousands)	Employment-hours (in millions)	Number of disabling injuries				Total time lost (days)	Frequency rate ¹	Severity rate ¹	
				Total	Resulting in—						
					Death	Permanent total disability	Permanent partial disability				Temporary total disability
<i>Manufacturing—Con.</i>											
Miscellaneous manufacturing—Continued.											
Smelting and refining (nonferrous).....	70	26	56	1,199	12	1	181	1,005	257,085	21.23	4.55
Nonferrous metal products.....	8	6	14	197	-----	-----	38	159	22,608	14.59	1.67
<i>Nonmanufacturing</i>											
Public utilities.....	253	150	315	3,097	59	5	129	2,904	599,666	9.87	1.68
Transportation.....	62	36	83	974	10	1	40	923	125,532	11.73	1.51
Streetcar.....	12	2	4	26	1	-----	1	24	6,710	7.35	1.90
Bus.....	17	5	12	233	2	-----	16	215	38,367	19.55	3.22
Both streetcar and bus.....	33	30	68	715	7	1	23	684	80,455	10.58	1.19
Electric light and power, and gas.....	142	95	193	1,664	36	2	69	1,557	347,825	8.63	1.80
Electric power and light.....	104	84	169	1,250	34	2	61	1,153	317,416	7.38	1.87
Gas.....	18	5	10	86	-----	-----	2	84	2,173	8.41	.21
Both electric and gas.....	20	6	13	328	2	-----	6	320	28,236	25.06	2.16
Utilities, not elsewhere classified.....	49	18	39	459	13	2	20	424	126,309	11.79	3.24
Laundry and dry cleaning.....	1,802	76	170	1,754	17	1	95	1,641	290,031	10.58	1.76
Dry cleaning.....	528	12	28	310	4	-----	13	293	51,368	11.07	1.83
Laundries.....	923	45	100	1,043	7	1	68	967	173,757	10.45	1.74
Both laundry and dry cleaning.....	351	19	42	401	6	-----	14	381	64,906	9.44	1.53

1937

All industries.....	20,167	4,294	8,470	140,744	898	59	10,390	129,397	18,502,396	17.19	2.26
<i>Manufacturing</i>											
Total manufacturing.....	18,112	4,049	7,941	134,931	818	56	10,110	123,947	17,493,500	17.82	2.31
Chemical products.....	1,409	239	476	6,339	76	3	535	5,725	1,189,149	13.70	2.58
Druggist preparations.....	194	23	48	299	-----	-----	32	267	41,234	6.26	.86
Explosives.....	32	8	15	94	3	-----	21	70	32,299	6.10	2.10
Fertilizers.....	361	13	23	965	14	-----	27	924	134,891	41.59	5.81
Paints and varnishes.....	357	21	44	595	8	-----	47	540	121,302	13.63	2.78
Petroleum refining.....	95	62	117	1,493	16	2	126	1,349	270,904	12.79	2.32
Rayon and allied products.....	14	24	48	497	2	-----	40	455	66,024	10.41	1.38
Soap.....	72	15	31	379	3	-----	56	320	81,949	12.18	2.63
Not elsewhere classified.....	284	73	150	2,017	30	1	186	1,800	440,546	13.41	2.93
Food products.....	1,878	289	572	13,113	81	5	840	12,187	1,630,319	21.49	2.56
Baking.....	482	50	109	1,786	9	-----	126	1,651	220,552	16.40	2.02
Canning and preserving.....	363	51	78	2,104	8	-----	99	1,997	192,114	26.81	2.45
Confectionery.....	208	29	59	733	1	-----	80	652	87,100	12.47	1.48
Flour, feed, and other grain-mill products.....	535	32	71	1,645	21	2	86	1,536	282,170	23.14	3.97

See footnotes at end of table.

TABLE 3.—*Injury Rates and Injuries by Extent of Disability for 20,167 Identical Establishments, 1936 and 1937—Continued*

1937—Continued

Industry	Number of establishments	Number of employees (in thousands)	Employee-hours (in millions)	Number of disabling injuries				Total time lost (days)	Frequency rate ¹	Severity rate ¹	
				Total	Resulting in—						
					Death	Permanent total disability	Permanent partial disability				Temporary total disability
Manufacturing—Con.											
Food products—Con.											
Slaughtering and meat packing.....	187	107	214	5,744	32	3	382	5,327	687,717	26.81	3.21
Sugar refining.....	61	16	31	892	10	—	48	834	140,883	29.06	4.59
Not elsewhere classified.....	42	4	10	209	—	—	19	190	19,783	21.77	2.06
Iron and steel and their products.....											
Iron and steel.....	2,192	824	1,703	29,092	241	14	2,255	26,582	3,964,257	18.60	2.55
Hardware.....	760	588	1,295	18,829	189	12	1,209	17,419	2,649,575	15.63	2.20
Machine tools.....	350	58	124	1,891	11	—	197	1,683	228,991	15.29	1.85
Stamped and enameled ware.....	162	30	78	1,133	8	—	84	1,041	124,987	14.56	1.61
Steam fitting and apparatus.....	348	54	108	2,717	11	1	405	2,300	424,667	25.20	3.94
Stoves.....	166	46	94	1,683	7	—	117	1,559	154,627	18.00	1.65
Structural and ornamental iron work.....	139	27	53	1,793	6	—	121	1,666	171,096	34.03	3.25
Not elsewhere classified.....	232	10	22	887	5	1	102	779	170,781	41.10	7.91
Leather and leather products.....	35	11	21	159	4	—	20	135	39,533	7.55	1.88
Leather.....	550	158	300	3,521	6	1	178	3,336	294,084	11.10	4.90
Boots and shoes.....	146	33	66	1,324	4	—	63	1,257	118,390	19.96	1.78
Not elsewhere classified.....	385	123	229	2,105	1	1	108	1,995	162,359	9.18	.71
Lumber and lumber products.....	19	2	5	92	1	—	7	84	13,335	20.41	2.96
Logging.....	2,201	222	457	18,662	107	7	1,528	17,020	2,702,586	52.62	7.56
Planing mills.....	91	14	25	2,896	28	1	170	2,697	535,492	116.11	21.47
Sawmills.....	657	38	79	2,623	9	1	300	2,313	380,837	33.33	4.84
Furniture.....	337	41	84	5,289	33	1	293	4,962	631,489	63.06	7.53
Not elsewhere classified.....	743	95	195	3,907	13	2	483	3,409	591,399	19.99	3.03
Machinery (not transportation).....	373	36	74	3,947	24	2	282	3,639	563,369	53.66	7.66
Agricultural implements.....	2,690	618	1,291	24,699	100	7	2,296	22,296	3,077,801	20.11	2.46
Electrical machinery, apparatus, and supplies.....	100	62	127	2,785	4	1	373	2,407	350,674	21.93	2.76
Foundry and machine-shop products.....	263	231	475	3,702	17	—	499	3,186	587,400	7.80	1.24
Not elsewhere classified.....	1,247	147	311	9,573	43	2	710	8,818	1,157,408	30.80	3.72
Paper and allied products.....	1,070	178	378	8,639	36	4	714	7,885	982,229	22.85	2.60
Pulp.....	749	130	277	7,000	41	1	432	6,526	848,495	24.49	3.01
Paper.....	15	3	6	297	3	—	16	278	42,411	51.64	7.37
Both paper and pulp.....	114	29	62	1,722	11	—	92	1,619	200,920	27.88	3.25
Folding boxes.....	122	57	124	3,329	21	1	168	3,139	376,407	26.74	3.02
Set-up boxes.....	176	17	35	728	2	—	51	675	93,769	20.55	2.65
Not elsewhere classified.....	245	13	26	351	3	—	50	298	65,301	13.71	2.55
	77	12	24	573	1	—	55	517	69,687	24.34	2.96

See footnotes at end of table.

TABLE 3.—*Injury Rates and Injuries by Extent of Disability for 20,167 Identical Establishments, 1936 and 1937—Continued*

1937—Continued

Industry	Number of establishments	Number of employees (in thousands)	Employee-hours (in millions)	Number of disabling injuries				Total time lost (days)	Frequency rate ¹	Severity rate ¹	
				Total	Resulting in—						
					Death	Permanent total disability	Permanent partial disability				Temporary total disability
<i>Manufacturing—Con.</i>											
Printing and publishing products.....	2, 220	138	288	2, 103	12	1	185	1, 905	328, 802	* 7.34	* 1.03
Book and job.....	1, 416	63	126	1, 012	3	—	110	899	160, 653	8.03	1.28
News and periodical.....	652	66	135	901	6	—	51	844	104, 943	6.65	.77
Not elsewhere classified.....	152	10	26	190	3	1	24	162	63, 206	7.21	2.40
Rubber and rubber products.....	52	96	162	2, 118	17	2	97	2, 002	232, 740	* 12.24	* 1.47
Rubber tires.....	25	64	100	1, 567	10	2	46	1, 509	133, 741	15.70	1.34
Rubber goods (other than tires).....	21	16	33	307	2	—	22	280	40, 250	9.27	1.22
Not elsewhere classified.....	6	16	29	244	5	—	29	210	58, 749	8.38	2.02
Stone, clay, and glass products.....	849	142	269	5, 729	39	4	250	5, 436	629, 074	* 21.20	* 2.30
Brick, tile, and terra cotta.....	507	38	75	2, 643	16	2	111	2, 514	290, 088	35.08	3.85
Cement.....	110	18	36	177	11	1	29	136	107, 112	4.87	2.95
Glass.....	134	65	117	2, 262	8	1	91	2, 162	181, 502	19.30	1.55
Pottery.....	71	17	35	516	3	—	12	501	37, 982	14.88	1.10
Not elsewhere classified.....	27	3	6	131	1	—	7	123	12, 390	23.15	2.19
Textile and textile-mill products.....	2, 745	722	1, 303	14, 245	38	9	758	13, 440	1, 357, 615	* 9.45	* 9.99
Carpets and rugs.....	24	19	33	384	4	1	32	347	87, 997	11.76	2.70
Clothing, men's.....	406	62	101	609	4	2	44	559	98, 356	6.02	.97
Clothing, women's.....	545	38	65	317	1	1	20	295	50, 776	4.88	.78
Cotton goods.....	478	276	509	7, 044	12	2	351	6, 679	545, 830	13.83	1.07
Dyeing and finishing.....	164	30	58	829	3	—	48	778	77, 378	14.36	1.34
Knit goods.....	592	131	236	1, 664	2	—	73	1, 589	123, 234	7.05	.52
Silk and rayon products, not elsewhere classified.....	15	7	13	152	1	—	7	144	14, 151	11.88	1.11
Woolen goods.....	338	103	185	2, 171	9	1	132	2, 029	266, 157	11.73	1.44
Not elsewhere classified.....	183	57	104	1, 075	2	2	51	1, 020	93, 736	10.37	.90
Transportation equipment.....	225	343	593	6, 017	40	1	485	5, 491	774, 260	* 9.71	* 1.24
Motor vehicles.....	143	303	494	4, 318	18	1	363	3, 936	501, 767	8.73	1.02
Shipbuilding.....	67	32	81	1, 400	17	—	116	1, 267	237, 083	17.23	2.92
Not elsewhere classified.....	15	8	17	299	5	—	6	288	35, 410	17.46	2.07
Miscellaneous manufacturing.....	362	128	251	2, 293	20	1	271	2, 001	464, 318	* 9.73	* 1.35
Coke ovens.....	24	10	20	85	4	—	7	74	36, 071	4.21	1.79
Tobacco products.....	202	45	83	489	1	—	44	444	51, 869	5.87	.62
Radio and phonograph.....	58	41	76	451	—	—	68	383	69, 116	5.96	.91
Smelting and refining (nonferrous).....	70	25	58	1, 094	15	1	132	946	295, 586	18.74	5.06
Nonferrous metal products.....	8	7	14	174	—	—	20	154	11, 676	12.69	.85

See footnotes at end of table.

TABLE 3.—*Injury Rates and Injuries by Extent of Disability for 20,167 Identical Establishments, 1936 and 1937—Continued*

1937—Continued

Industry	Number of establishments	Number of employees (in thousands)	Employee-hours (in millions)	Number of disabling injuries				Total time lost (days)	Frequency rate ¹	Severity rate ¹	
				Total	Resulting in—						
					Death	Permanent total disability	Permanent partial disability				Temporary total disability
<i>Nonmanufacturing</i>											
Public utilities.....	253	165	350	4,246	71	3	197	3,975	793,666	12.16	4.00
Transportation.....	62	37	85	1,052	11	—	39	1,002	142,627	12.39	1.68
Streetcar.....	12	1	2	42	—	—	1	41	4,886	16.84	1.96
Bus.....	17	5	13	186	2	—	7	177	24,576	14.80	1.96
Both streetcar and bus.....	33	31	70	824	9	—	31	784	113,165	11.79	1.62
Electric light and power, and gas.....	142	107	221	2,667	43	2	123	2,499	477,073	12.05	2.16
Electric power and light.....	104	96	198	2,312	38	2	109	2,163	420,157	11.68	2.12
Gas.....	18	5	10	59	—	—	5	54	10,358	5.78	1.01
Both electric and gas.....	20	6	13	296	5	—	9	282	46,558	22.32	3.51
Utilities, not elsewhere classified.....	49	20	44	527	17	1	35	474	173,966	12.03	3.97
Laundry and dry cleaning.....	1,802	80	178	1,567	9	—	83	1,475	215,230	8.66	4.26
Dry cleaning.....	528	13	28	254	3	—	9	242	32,834	9.07	1.17
Laundries.....	923	47	102	872	4	—	50	818	131,071	8.55	1.29
Both laundry and dry cleaning.....	351	20	48	441	2	—	24	415	51,325	9.12	1.06

¹ The frequency rate is the average number of disabling injuries for each million employee-hours worked. The severity rate is the average number of days lost for each thousand employee-hours worked. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1937.

² Weighted by employment as shown in Census of Manufactures and Census of Business, 1935, and computed for 1936 by means of indexes of employment of Bureau of Labor Statistics.

³ Includes only plant employees.

⁴ Weighted by employment as shown by Census of Manufactures, 1937, for manufacturing industries, and Bureau of Labor Statistics' estimates of employment for nonmanufacturing industries.

The ranking of industries on the basis of size of frequency and severity rates, shown in table 3, indicates that on the whole the 1937 ranking differed very little from that of 1936. In each of the 2 years, logging ranked as the industry with the worst experience in terms of both frequency and severity rates. The sawmill industry, which was seventy-eighth in the frequency rate ranking in 1937, was seventy-sixth in severity. The other two industries in the lumber and lumber products group, namely, planing mills and furniture, also were among the industries with poor injury records.

Among the few significant changes in rank are those for book and job printing and publishing which was seventh lowest in 1936, but fifteenth in 1937. Similarly, the rank in the severity rate for this industry moved from twelfth to twentieth. Streetcar transportation, which was twelfth in 1936, was forty-seventh in 1937. On the

other hand, bus transportation moved from fifty-fifth in 1936 to forty-first in 1937, and its severity-rate ranking changed similarly from sixty-fourth to thirty-fifth. Electric power and light, thirteenth in 1936 in size of frequency, was twenty-fifth in 1937. Gas production, on the other hand, moved from eighteenth in 1936 to fourth in 1937. The laundry and dry cleaning group shows better ranking in 1937 in each of its three groups.

TABLE 4.—Rank According to Frequency and Severity Rates, of 79 Industries, 1936 and 1937 ¹

Industry	Frequency-rate rank		Severity-rate rank	
	1936	1937	1936	1937
Chemical products:				
Druggist preparations.....	6	9	16	7
Explosives.....	10	8	71	41
Fertilizers.....	73	75	73	74
Paints and varnishes.....	37	36	58	54
Petroleum refining.....	33	34	53	45
Rayon and allied products.....	24	24	15	24
Soap.....	15	31	46	50
Not elsewhere classified.....	36	35	56	56
Food products:				
Baking.....	47	46	49	37
Canning and preserving.....	63	66	43	47
Confectionery.....	25	32	13	26
Flour, feed, and other grain-mill products.....	62	61	69	67
Slaughtering and meat packing.....	66	66	55	62
Sugar refining.....	72	69	62	71
Not elsewhere classified.....	75	57	70	39
Iron and steel and their products:				
Iron and steel.....	46	44	44	44
Hardware.....	43	43	26	33
Machine tools.....	42	40	24	28
Stamped and enameled ware.....	61	64	65	68
Steam fittings and apparatus.....	48	50	42	30
Stoves.....	69	72	59	63
Structural and ornamental iron work.....	74	74	75	78
Not elsewhere classified.....	16	13	19	34
Leather and leather products:				
Leather.....	49	53	29	31
Boots and shoes.....	22	21	6	3
Not elsewhere classified.....	50	55	23	58
Lumber and lumber products:				
Logging.....	79	79	79	79
Planing mills.....	70	71	74	72
Sawmills.....	78	78	76	76
Furniture.....	54	54	51	61
Not elsewhere classified.....	76	77	77	77
Machinery (not transportation):				
Agricultural implements.....	51	58	40	53
Electrical machinery, apparatus, and supplies.....	19	14	24	19
Foundry and machine-shop products.....	67	70	60	66
Not elsewhere classified.....	56	60	48	49
Paper and allied products:				
Pulp.....	77	76	78	75
Paper.....	68	68	54	63
Both paper and pulp.....	65	65	61	60
Folding boxes.....	59	56	47	51
Set-up boxes.....	31	37	21	48
Not elsewhere classified.....	52	63	52	58
Printing and publishing products:				
Book and job.....	7	15	12	20
News and periodical.....	11	10	11	4
Not elsewhere classified.....	26	12	50	40
Rubber and rubber products:				
Rubber tires.....	45	45	31	22
Rubber goods (other than tires).....	17	22	9	18
Not elsewhere classified.....	14	16	3	37

¹ The lowest rate is ranked first, the second lowest second, etc.; 2 industries tying for the same rank were assigned the same rank number, but the next number was omitted to avoid distortion of subsequent rank numbers.

TABLE 4.—Rank According to Frequency and Severity Rates, of 79 Industries, 1936 and 1937—Continued

Industry	Frequency-rate rank		Severity-rate rank	
	1936	1937	1936	1937
Stone, clay, and glass products:				
Brick, tile, and terra cotta.....	71	73	57	67
Cement.....	9	2	67	57
Glass.....	52	52	35	27
Pottery.....	39	42	17	15
Not elsewhere classified.....	60	62	30	43
Textile and textile-mill products:				
Carpets and rugs.....	21	27	38	52
Clothing, men's.....	3	7	8	10
Clothing, women's.....	2	3	7	5
Cotton goods.....	38	38	14	14
Dyeing and finishing.....	40	39	36	22
Knit goods.....	5	11	2	1
Silk and rayon products, not elsewhere classified.....	29	29	4	16
Woolen goods.....	35	26	28	25
Not elsewhere classified.....	28	22	22	8
Transportation equipment:				
Motor vehicles.....	20	18	17	12
Shipbuilding.....	57	48	68	55
Not elsewhere classified.....	44	49	31	40
Miscellaneous manufacturing:				
Coke ovens.....	1	1	62	32
Tobacco products.....	4	5	5	2
Radio and phonograph.....	8	6	10	9
Smelting and refining (nonferrous).....	58	51	72	73
Nonferrous metal products.....	41	33	31	6
Public utilities:				
Transportation:				
Streetcar.....	12	47	41	35
Bus.....	55	41	64	35
Both streetcar and bus.....	30	28	20	29
Electric power and gas:				
Electric power and light.....	13	25	39	42
Gas.....	18	4	1	11
Both electric and gas.....	64	59	45	65
Utilities, not elsewhere classified.....	34	30	65	69
Laundry and dry cleaning:				
Dry cleaning.....	32	19	37	17
Laundries.....	27	17	34	21
Both laundry and dry cleaning.....	23	20	27	13

In table 5 are shown the percentage changes in employee-hours worked and the percentage increases or decreases in the frequency and severity rates which accompanied these changes. It is apparent that the pattern is far from uniform and that increases or decreases in employment were accompanied by decidedly different changes in the injury rates in the various industries. Some of the most significant industry changes have already been cited. The data necessary to explain these differences are not available.

TABLE 5.—Changes in Injury Rates Compared With Changes in Employment in Identical Establishments, 1936 to 1937

Industry	Employee-hours worked		Frequency rate		Severity rate	
	Percent of increase	Percent of decrease	Percent of increase	Percent of decrease	Percent of increase	Percent of decrease
Chemical products:						
Druggist preparations	6.1			0.5		16.5
Explosives	14.5			10.8		53.1
Fertilizers	10.0		0.3		21.0	
Paints and varnishes	7.7			1.3		7.0
Petroleum refining	6.1		10.4			11.8
Rayon and allied products	7.7		7.7		39.4	
Soap		1.7	51.9		21.2	
Not elsewhere classified	6.3		1.7		6.9	
Food products:						
Baking	10.8			3.5		15.8
Canning and preserving	10.7		9.5		21.3	
Confectionery		.3	25.7		60.9	
Flour, feed, and other grain-mill products	7.8			5.4	5.6	
Slaughtering and meat packing		10.5	.2		19.3	
Sugar refining		13.7		29.2	46.2	
Not elsewhere classified	70.3			53.3		52.3
Iron and steel and their products:						
Iron and steel	10.3			3.3	7.3	
Hardware	12.0		1.1		24.2	
Machine tools	41.1			2.0	22.9	
Stamped and enameled ware	.2		8.9		21.6	
Steam fittings and apparatus	10.5		5.1			15.8
Stoves		2.3	11.1		8.3	
Structural and ornamental iron work	15.7			1.7	9.7	
Not elsewhere classified	6.2			8.2	59.3	
Leather and leather products:						
Leather		4.3	10.9		9.2	
Boots and shoes		5.3		.8	9.2	
Not elsewhere classified	1.1		11.0		129.5	
Lumber and lumber products:						
Logging		.6	8.1			11.8
Planing mills	7.1		.4			.4
Sawmills	14.4		2.0			5.9
Furniture		1.3	3.3		22.2	
Not elsewhere classified	7.1			9.3		12.0
Machinery (not transportation):						
Agricultural implements	11.8		18.2		46.0	
Electrical machinery, apparatus, and supplies	29.9			10.2		5.3
Foundry and machine-shop products	13.1		5.8		20.4	
Not elsewhere classified	18.6		14.0		10.6	
Paper and allied products:						
Pulp	54.8			14.7		36.2
Paper	3.5			5.7	23.1	
Both paper and pulp	4.9		5.8			2.9
Folding boxes		7.7		5.4	19.9	
Set-up boxes		13.4	26.6		105.6	
Not elsewhere classified	5.4		29.5		13.4	
Printing and publishing products:						
Book and job		19.7	24.9		47.1	
News and periodical	2.6			8.9		9.4
Not elsewhere classified	60.0			28.5		2.0
Rubber and rubber products:						
Rubber tires		7.5		2.2		19.8
Rubber goods (other than tires)	10.5		11.2		58.4	
Not elsewhere classified	9.2		11.1		267.3	
Stone, clay, and glass products:						
Brick, tile, and terra cotta	10.4			9.3	29.2	
Cement	14.9			27.4		18.1
Glass	8.2		2.7			12.4
Pottery	5.5		5.2			3.5
Not elsewhere classified	23.4		3.1		33.5	
Textile and textile-mill products:						
Carpets and rugs		2.2	30.8		45.9	
Clothing, men's		7.2	5.1		42.6	
Clothing, women's		5.1		9.1	18.2	
Cotton goods	1.4			.1	15.1	
Dyeing and finishing		10.3	.1			25.1
Knit goods		6.4	18.3		62.5	
Silk and rayon products, not elsewhere classified	7.2		13.4		98.2	
Woolen goods		9.6		5.0		10.6
Not elsewhere classified	3.3			1.0		28.0

TABLE 5.—Changes in Injury Rates Compared With Changes in Employment in Identical Establishments, 1936 to 1937—Continued

Industry	Employee-hours worked		Frequency rate		Severity rate	
	Percent of increase	Percent of decrease	Percent of increase	Percent of decrease	Percent of increase	Percent of decrease
Transportation equipment:						
Motor vehicles.....	10.0			.1		10.5
Shipbuilding.....	11.0			18.4		21.1
Not elsewhere classified.....	61.3		9.7		24.0	
Miscellaneous manufacturing:						
Coke ovens.....	8.7			9.1		43.0
Tobacco products.....	1.9			1.0	1.6	
Radio and phonograph.....		8.9		8.7	11.0	
Smelting and refining (nonferrous).....	3.4			11.7	11.2	
Nonferrous metal products.....	1.6			13.0		49.1
Public utilities:						
Transportation.....	2.3		5.6		11.3	
Streetcar.....		29.5	129.1		3.2	
Bus.....	5.5			24.3		39.1
Both streetcar and bus.....	3.4		11.4		36.1	
Electric power and gas.....	14.8		39.6		20.0	
Electric power and light.....	16.8		58.3		13.4	
Gas.....		.2		31.3	381.0	
Both electric and gas.....	1.4			10.9	62.5	
Utilities, not elsewhere classified.....	12.5		2.0		22.5	
Laundry and dry cleaning:						
Dry cleaning.....	.1			18.1		36.1
Laundries.....	2.1			18.2		25.9
Both laundry and dry cleaning.....	13.9			3.4		30.7

Disability Distribution

In table 6 are shown the number of deaths and permanent and temporary disabilities per thousand injuries for each of the industries listed. The data given for industry groups have been weighted by the total employment in each industry in the group.

TABLE 6.—Disability Distribution per 1,000 Injuries and Average Days Lost per Disability for Identical Establishments, 1936 and 1937

Industry	Number per 1,000 injuries						Average days lost per disability			
	Death and permanent total disability ¹		Permanent partial disability		Temporary total disability		Permanent partial disability		Temporary total disability	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
All industries.....	8	7	70	74	922	919	1,001	1,045	18	20
Total manufacturing.....	7	6	72	77	921	917	961	1,006	18	20
Chemical products.....	17	12	88	92	895	896	1,083	1,121	20	22
Druggist preparations.....	11	0	71	107	918	893	1,183	1,113	19	21
Explosives.....	76	32	185	223	739	745	997	593	20	26
Fertilizers.....	10	15	24	28	966	957	1,648	1,315	15	17
Paints and varnishes.....	16	13	82	79	902	908	1,270	1,337	18	19
Petroleum refining.....	19	12	103	84	878	904	904	1,032	24	24
Rayon and allied products.....	2	4	61	80	937	916	1,233	1,105	14	22
Soap.....	16	8	146	148	838	844	1,069	1,019	24	22
Not elsewhere classified.....	17	15	86	92	897	893	1,014	1,155	20	22

¹ Each death or permanent total disability is charged with a time loss of 6,000 days.

TABLE 6.—Disability Distribution per 1,000 Injuries and Average Days Lost per Disability for Identical Establishments, 1936 and 1937—Continued

Industry	Number per 1,000 injuries						Average days lost per disability			
	Death and permanent total disability		Permanent partial disability		Temporary total disability		Permanent partial disability		Temporary total disability	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
Food products.....	5	5	63	67	932	928	1,060	1,086	17	18
Baking.....	7	5	75	71	918	924	1,142	1,092	18	18
Canning and preserving.....	3	4	46	47	951	949	979	1,109	18	17
Confectionery.....	2	1	75	109	923	890	911	882	15	16
Flour, feed, and other grain-mill products.....	12	14	53	52	935	934	1,194	1,308	17	21
Slaughtering and meat packing.....	4	6	63	67	933	927	983	1,018	14	17
Sugar refining.....	4	11	31	54	965	935	1,313	1,356	12	19
Not elsewhere classified.....	0	0	61	91	939	909	1,303	884	14	16
Iron and steel and their products.....	8	8	72	80	920	912	791	809	19	22
Iron and steel.....	10	11	58	64	932	925	794	838	21	25
Hardware.....	3	6	99	104	898	890	667	659	16	20
Machine tools.....	5	7	59	74	936	919	752	677	16	19
Stamped and enameled ware.....	4	4	156	149	840	847	676	768	15	18
Steam fittings and apparatus.....	9	4	57	70	934	926	820	736	15	17
Stoves.....	5	3	59	67	936	930	832	862	18	18
Structural and ornamental iron work.....	6	7	95	115	899	878	1,243	1,170	18	20
Not elsewhere classified.....	12	25	129	126	859	849	402	608	21	25
Leather and leather products.....	2	1	46	50	952	948	929	1,048	16	20
Leather.....	4	3	54	48	942	949	932	1,140	16	18
Boots and shoes.....	2	1	44	51	954	948	928	1,028	16	20
Not elsewhere classified.....	0	11	49	76	951	913	1,225	879	11	14
Lumber and lumber products.....	7	6	76	83	917	911	1,284	1,148	19	21
Logging.....	16	8	53	59	931	931	2,020	1,698	22	27
Planing mills.....	7	4	96	114	897	882	956	915	17	20
Sawmills.....	6	6	56	55	938	939	1,329	1,113	20	20
Furniture.....	2	4	115	124	883	872	877	917	15	17
Not elsewhere classified.....	7	7	65	71	928	922	1,302	1,168	19	21
Machinery (not transportation).....	6	5	91	100	903	895	801	879	16	18
Agricultural implements.....	4	2	101	134	895	864	619	762	15	15
Electrical machinery, apparatus, and supplies.....	7	5	119	135	874	860	788	848	16	20
Foundry and machine-shop products.....	4	5	70	74	926	921	932	1,029	17	18
Not elsewhere classified.....	7	5	82	83	911	912	754	842	16	18
Paper and allied products.....	5	5	68	73	927	922	1,115	1,063	17	20
Pulp.....	4	10	93	54	903	936	1,610	1,213	15	18
Paper.....	3	6	44	53	953	941	1,186	1,125	18	19
Both paper and pulp.....	5	7	65	50	930	943	1,191	1,069	18	21
Folding boxes.....	1	3	61	70	938	927	1,270	1,319	18	22
Set-up boxes.....	0	9	109	142	891	849	911	844	17	17
Not elsewhere classified.....	10	2	83	96	907	902	829	966	14	20
Printing and publishing products.....	6	5	72	83	922	912	1,020	1,093	17	18
Book and job.....	5	3	86	109	909	888	1,044	1,146	18	18
News and periodical.....	6	7	62	57	932	936	1,002	1,040	17	19
Not elsewhere classified.....	6	21	114	126	880	853	1,682	1,502	17	19
Rubber and rubber products.....	8	11	44	61	948	928	783	726	18	26
Rubber tires.....	8	8	39	29	953	963	1,009	608	17	22
Rubber goods (other than tires).....	8	7	48	72	944	921	563	977	18	24
Not elsewhere classified.....	0	20	90	119	910	861	633	738	18	35
Stone, brick, and glass products.....	14	13	41	54	945	933	1,020	1,046	18	21
Clay, tile, and terra cotta.....	6	7	28	42	966	951	955	1,236	15	18
Cement.....	57	68	127	164	816	768	1,369	1,029	28	39
Glass.....	8	4	30	40	962	956	1,038	982	17	18
Pottery.....	9	6	17	23	974	971	800	900	15	18
Not elsewhere classified.....	0	8	58	53	942	939	1,025	750	14	9
Textile and textile-mill products.....	5	5	53	57	942	938	1,038	1,174	17	19
Carpets and rugs.....	7	13	140	83	853	904	1,101	1,598	14	20
Clothing, men's.....	8	10	43	72	949	918	1,300	1,174	16	19
Clothing, women's.....	8	6	65	63	927	931	869	1,670	18	18

TABLE 6.—*Disability Distribution per 1,000 Injuries and Average Days Lost per Disability for Identical Establishments, 1936 and 1937—Continued*

Industry	Number per 1,000 injuries						Average days lost per disability			
	Death and permanent total disability		Permanent partial disability		Temporary total disability		Permanent partial disability		Temporary total disability	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
Textile and textile-mill products—Con.										
Cotton goods.....	2	2	41	50	957	948	960	980	17	18
Dyeing and finishing.....	4	4	72	58	924	938	1,138	867	19	23
Knit goods.....	3	1	36	44	961	955	730	1,205	13	15
Silk and rayon products, not elsewhere classified.....	0	7	24	46	976	947	1,633	814	14	17
Woolen goods.....	3	5	82	61	915	934	1,151	1,223	19	22
Not elsewhere classified.....	8	4	48	47	944	949	1,164	982	20	19
Transportation equipment.....	8	5	97	84	895	911	742	776	21	28
Motor vehicles.....	7	4	101	84	892	912	707	756	22	29
Shipbuilding.....	15	12	72	83	913	905	982	927	16	22
Not elsewhere classified.....	12	17	59	20	929	963	360	350	14	11
Miscellaneous manufacturing.....	9	5	141	112	850	883	674	817	17	19
Coke ovens.....	105	47	70	82	825	871	300	1,300	35	40
Tobacco products.....	2	2	85	90	913	908	894	900	16	14
Radio and phonograph.....	4	0	157	151	839	849	582	924	14	16
Smelting and refining (nonferrous).....	11	15	151	121	838	864	868	1,360	22	21
Nonferrous metal products.....	0	0	193	115	807	885	536	435	14	19
Public utilities.....	18	15	41	43	941	942	1,230	1,305	18	21
Transportation.....	11	10	41	37	948	953	1,074	1,342	18	24
Streetcar.....	38	0	38	24	924	976	360	4,000	17	22
Bus.....	9	11	69	38	922	951	1,434	1,371	16	17
Both streetcar and bus.....	11	11	32	38	957	951	857	1,250	19	26
Electric power and gas.....	23	17	41	46	936	937	1,333	1,287	18	20
Electric power and light.....	29	17	49	47	922	936	1,312	1,264	19	20
Gas.....	0	0	23	85	977	915	400	1,780	16	27
Both electric and gas.....	6	17	18	30	976	953	1,850	1,289	16	18
Utilities, not elsewhere classified.....	33	34	44	66	923	900	1,403	1,543	19	25
Laundry and dry cleaning.....	9	7	60	52	931	941	1,613	1,673	18	19
Dry cleaning.....	13	12	42	35	945	953	1,746	1,111	16	20
Laundries.....	8	5	65	57	927	938	1,576	1,829	19	19
Both laundry and dry cleaning.....	15	5	35	54	950	941	1,550	1,294	19	20

DEATH AND PERMANENT TOTAL DISABILITY

The manufacturing industries group with the highest number of deaths per thousand injuries was that of stone, clay, and glass products which had 14 such fatalities in 1936 and 13 in 1937. The high figure was due largely to the high proportion of deaths and permanent total disabilities in the cement industry, with 68 per thousand injuries in 1937. The second highest manufacturing group was that of chemical products, which had 12 deaths and permanent total disabilities in 1937 for every thousand disabling injuries. This figure, however, represented a decided decrease from that of 17 for 1936. The highest fatality rate within the chemical-products group was that of 32 for explosives, which, however, was less than half of that of 76 for 1936. Soap manufacturing, which had 16 fatalities per thousand injuries in 1936, dropped to 8 in 1937. A similar drop was experienced by petroleum refining from 19 to 12. On the other hand, the ratio of deaths for the fertilizer industry increased from 10 to 15.

In the food-products group, the number of fatalities per thousand injuries was uniformly low, with the exception of flour, feed, and other grain-mill products, which rose from 12 to 14, and sugar refining which more than doubled, rising from 4 to 11. In the iron and steel products group, the number of fatalities per thousand injuries remained at 8 for each of the 2 years. For the iron and steel industry itself, the fatality ratio increased from 10 to 11. Within this group, in hardware it doubled from 3 to 6, and in steam fittings and apparatus it more than halved—from 9 to 4.

The leather and leather-products group showed only 1 fatality per thousand injuries for 1937 and 2 in 1936, and in the lumber and lumber-products group, fatalities decreased from 7 to 6. The largest improvement in this group was experienced by logging, in which the ratio of fatalities dropped from 16 to 10, and in planing mills, in which it decreased from 7 to 4. The machinery group showed relatively little change, as did the paper- and allied-products group. In this latter group, the number of fatalities per thousand injuries in set-up box manufacturing increased from 0 to 1936 to 9 in 1937.

Attention has already been called to the high ratio of deaths and permanent total injuries in the cement industry, but in view of the fact that the frequency rate for the group is very low, this high ratio must be attributed to the absence of minor injuries, which can be traced definitely to vigorous and comprehensive safety work.

Among the nonmanufacturing groups, streetcar transportation showed a sharp decrease from 38 fatalities per thousand injuries in 1936 to none in 1937. Two of the industries within the electric power and gas group showed decreases, and a third, gas, showed no fatalities in either of the 2 years.

PERMANENT PARTIAL DISABILITY

The experience for the explosives industry indicates that although disabling injuries were relatively few, as indicated by the low frequency rate of 6.10, many of the injuries which did occur tended to be of a permanent nature. With 223 permanent disabilities per thousand injuries, the industry reflects the highest ratio within the industries surveyed. Further, this number represents a sizable increase over the already high ratio of 185 for 1936. On the whole, however, these injuries appear to have been relatively less serious, as permanent injuries go, as indicated by the relatively low time charge per disability of 745 days. Other industries with high ratios of permanent disabilities per thousand injuries were soap, with 148 in 1937 and 146 in 1936; stamped and enameled ware, with a decrease from 156 to 149; furniture, with an increase from 115 to 124; and agricultural implements, with an increase from 101 to 134. Other industries with high ratios of permanent injuries were set-up boxes, cement, radio and

phonograph, and smelting and refining. Outstanding for high average time charges for these permanent injuries were cement, with 1,029 days (a considerable decrease over the figure of 1,369 for 1936); bus transportation, with 1,371 as compared with 1,434 for 1936; and utilities not elsewhere classified, for which the average time charge increased from 1,403 days to 1,543. Similarly, the average time charges for permanent disability were high for the entire laundry and dry-cleaning group.

TEMPORARY TOTAL DISABILITY

In contrast with deaths and permanent injuries, a high number of temporary total disabilities per thousand injuries generally reflects an injury experience composed primarily of minor injuries. The industries, therefore, which stand out in this connection are those to which no reference has been made for high numbers of deaths and permanent disabilities per thousand injuries.

Among the industries with large numbers of temporary total disabilities were: Fertilizer; the entire food group (with the exception of confectionery); iron and steel; stoves; leather; boots and shoes; paper and pulp; news and periodical printing and publishing; rubber tires; brick, tile, and terra cotta; glass; pottery; women's clothing; knit goods; silk and rayon; and woolen goods. Average high time losses per temporary total disability were experienced by explosives, with 26 days in 1937 as against 20 in 1936; petroleum refining, with 24 days in each year; iron and steel, with 25 days in 1937 against 21 in 1936; rubber goods other than tires, with 24 in 1937 and 18 in 1936; cement, with 39 in 1937 as against 28 in 1936; motor vehicles manufacturing, with 29 in 1937; streetcar and bus transportation, with 26 in 1937; and utilities, not elsewhere classified, with 25 in 1937 as against 19 in 1936.

Industries with low average durations per temporary total injury were confectionery, with 16 and 15 days, respectively, in 1937 and 1936; slaughtering and meat packing, with 17 and 14 days; agricultural implements, with 15 days in each of the 2 years; knit goods, with 15 days in 1937 and 13 in 1936; and radio and phonograph, with 16 and 14, respectively, in 1937 and 1936.



INDUSTRIAL INJURIES TO WOMEN AND MEN, 1932 TO 1934

WOMEN form a substantial proportion of the persons injured in industry. Of the States reporting data on accidents by sex, there were 3 States in 1931 in which over 9 percent of the industrial accidents involved women; 5 States in 1932; and 7 States in 1933 and 1934. Rhode Island and New Hampshire, both important textile States,

had the largest proportion of women injured in industry, and Massachusetts, New Jersey, and Georgia also had substantial proportions. In the latest year reported (1934 in most cases) by 19 States which report accident data by sex,¹ large numbers of women were injured—over 4,000 in 4 States (Massachusetts, Missouri, Pennsylvania, and New York), from 1,000 to 2,500 in 6 States (Georgia, Illinois, Indiana, Michigan, Minnesota, and New Jersey), and substantial numbers in the other States. A study of the comparable State data on occupational injuries of women and men from 1932 to 1934 has been made by the United States Women's Bureau, the information herein being taken from the report of that study.² It is stated that because of the variations in the basis of reporting, data as between States are not comparable, but comparisons may be made of data for a series of years in a single State.

TABLE 1.—*Industrial Injuries in 19 States, by Sex, 1932 to 1934*

State	1932			1933			1934		
	Total	Females		Total	Females		Total	Females	
		Num-ber	Per-cent of total		Num-ber	Per-cent of total		Num-ber	Per-cent of total
Colorado.....	3,856	187	4.8	3,829	181	4.7	4,353	194	4.5
Georgia.....	18,126	1,650	9.1	19,077	1,812	9.5	22,266	1,776	8.0
Idaho ¹	6,116	321	5.2	5,870	311	5.3	5,870	311	5.3
Illinois ²	25,462	1,953	7.7	27,207	1,930	7.1	31,749	2,089	6.6
Indiana.....	17,529	1,243	7.1	³ 10,760	³ 801	7.4	17,995	1,102	6.1
Iowa ¹	⁴ 5,315	269	5.1	⁵ 3,632	164	4.5	⁵ 3,631	164	4.5
Kentucky.....	11,741	392	3.3	10,247	541	5.3	11,823	526	4.4
Maryland.....	8,139	611	7.5	7,564	610	8.1	8,435	548	6.5
Massachusetts.....	42,067	4,020	9.6	31,769	3,432	10.8	35,217	4,111	11.7
Michigan.....	16,662	923	5.5	13,156	814	6.2	18,975	1,030	5.4
Minnesota ¹	29,825	2,636	8.8	24,173	2,321	9.6	24,173	2,321	9.6
Missouri.....							51,841	4,940	9.5
New Hampshire.....				1,560	181	11.6	1,964	208	14.9
New Jersey.....	20,198	1,919	9.5	17,559	1,907	10.9	18,537	1,795	9.7
New York.....	82,433	7,884	9.6	74,487	8,269	11.1	69,918	7,452	10.7
Pennsylvania.....	85,099	4,944	5.8	85,642	4,893	5.7			
Rhode Island.....	2,322	311	13.4	2,109	309	14.7	2,311	320	13.8
South Dakota.....	4,935	357	7.2	3,852	251	6.5	3,998	281	7.0
Wisconsin.....	16,195	906	5.6	14,562	860	5.9			

¹ The numbers reported for a 2-year period have been divided by 2.

² For this table figures showing compensable cases occurring have been used.

³ 9-month period, the report period being changed.

⁴ Excludes 203 cases reported for the 2-year period ending June 30, 1932, not classified by sex.

⁵ Excludes 222 cases for the period ending June 30, 1934, not classified by sex.

Although as a rule men suffer the most serious injuries, there were during the 3 years 1932-34, in the 10 States reporting on extent of disability, 185 women who either lost their lives or were permanently

¹ Colorado, Georgia, Idaho, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, South Dakota, and Wisconsin.

² U. S. Women's Bureau Bulletin No. 160: Industrial Injuries to Women and Men, 1932 to 1934, by Margaret T. Mettert. Washington, 1938.

and totally disabled in the course of their employment. Over 4,000 women in New York, almost 1,600 in New Jersey, over 1,600 in Illinois, and considerable numbers in the other States, were permanently disabled during the same period. From 64 to 98 percent of the injuries of the men and from 71 to 99 percent of the injuries of the women, in the various States, were temporary disabilities. Table 2 shows the extent of disability suffered by women and by men from occupational injuries in 1934.

TABLE 2.—*Classification of Industrial Injuries, by Extent of Disability, Sex, and State, 1934*

State	Number of injuries		Percent of injuries that were—							
			Fatal		Permanent total		Permanent partial		Temporary	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Georgia.....	¹ 4,472	¹ 395 ²	2.1	0.5	—	—	11.0	6.6	86.9	92.9
Idaho.....	³ 5,559	³ 311	.6	.6	(³)	—	4.0	2.6	95.3	96.8
Illinois.....	⁴ 28,980	⁴ 2,135	2.4	.2	0.2	(³)	⁵ 30.9	⁵ 28.1	66.5	71.7
Maryland.....	7,887	548	1.0	—	—	—	4.8	3.6	94.3	96.4
Massachusetts.....	31,106	4,111	.7	.1	(³)	—	2.5	1.9	96.7	98.0
Michigan.....	17,945	1,030	1.0	.4	(³)	—	6.9	8.2	92.1	91.5
Minnesota.....	⁶ 14,606	⁶ 1,514	1.2	.3	.1	—	7.3	4.7	91.5	95.0
Missouri.....	46,901	4,940	.1	.1	(³)	—	2.2	.8	97.7	99.0
New Jersey.....	16,742	1,795	1.2	.3	.1	—	30.3	28.6	68.5	71.1
New York.....	62,466	7,452	1.2	.3	.1	0.1	24.0	18.4	74.7	81.3
Pennsylvania ⁷	44,237	2,490	1.9	.2	(³)	(³)	⁸ 4.5	⁸ 3.1	93.6	96.6

¹ Only compensable cases.

² Denied claims omitted. The numbers reported for a 2-year period have been divided by 2.

³ Less than $\frac{1}{10}$ of 1 percent.

⁴ Closed compensable cases.

⁵ Includes disfigurement.

⁶ The numbers reported for a 2-year period have been divided by 2. Permanent total and permanent partial are combined.

⁷ For 1933, the latest year for which statistics were available.

⁸ Permanent total and permanent partial are combined.

Bruises, contusions, or abrasions were the most common type of injuries to both sexes in the four States reporting nature of injury; they constituted from 14 to 38 percent of the reported injuries. Cuts and lacerations were also a common type. The more serious injuries, such as amputations and dislocations, occurred to women and men in about equal proportions. Men had a higher proportion of fractures, sprains, and strains, than women, while the reverse was true as to burns and scalds and punctured wounds.

In most of the States reporting on the point, the majority of the injuries occurred in the manufacturing industries, though most of the injuries to men in Pennsylvania, and a material proportion in Illinois and Indiana, were in mining and related industries. The proportion of women injured in factories was usually greater than that of men, the percentage in the various States ranging from 27 to 86 for men and from 40 to 89 for women. In New Hampshire and in Georgia

the highest percentages of the injuries occurring to women were in the textile mills, in Illinois they were in food plants, in Indiana and Pennsylvania in clothing factories, and in Michigan in machinery and vehicle factories.

In general, the major causes of injuries to women were machinery and falls of persons, while handling objects was the principal cause of injuries to men. Georgia, Illinois, Indiana, Michigan, New Hampshire, and New Jersey reported that at least 20 percent of the total injuries to women were caused by machinery, and Illinois, Indiana, Iowa, Michigan, New Hampshire, New Jersey, and Pennsylvania, that the same proportion was caused by falls of persons. Handling objects caused 20 percent or more of the injuries to men in Georgia, Illinois, New Hampshire, New Jersey, and Pennsylvania.

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Labor Laws and Court Decisions

RECENT COURT DECISIONS OF INTEREST TO LABOR

Constitutionality of State Law Regulating Hours of Truck Drivers

A STATUTE of New Hampshire, which prohibits the operation of motor vehicles for specified transportation by drivers who have been continuously on duty for more than 12 hours, was sustained as constitutional in a recent decision of the United States Supreme Court.¹ The act applies to common and contract carriers for hire, but does not cover those transporting products of their own manufacture, nor motor vehicles not principally engaged in the transportation of property for hire or operating exclusively in a city or town or within 10 miles of its limits. In addition to forbidding a driver to operate a motor vehicle for more than 12 hours, the statute provides that "after a driver has been continuously on duty for 12 hours, it shall be unlawful for him or for the owner of the vehicle to permit him to operate any such motor vehicle on the highways of this State until he shall have had at least 8 consecutive hours off duty." For violations of the act, the Public Service Commission is authorized after notice and hearing to suspend or revoke any registration certificate.

In upholding the validity of the statute, Mr. Justice Butler, who delivered the opinion of the Supreme Court, observed that the purpose of the act was "to protect users of the highways of this State from the danger likely to result to them from the operation thereon of trucks under the control of drivers suffering from the effects of fatigue." It was pointed out that the corporation had failed to show that in the operation of motor vehicles to which the statute applies, continuous driving for more than 12 hours is not more prevalent than in the operation of vehicles exempted from the provisions of the act. As there was a reasonable basis for the differentiation, the Court was of the opinion that "the classification in question does not conflict with the rule of equal protection."

The Court also held that the State statute was not superseded by the Federal act. That act authorized the Interstate Commerce Commission to "establish reasonable requirements with respect

¹ *H. P. Welch Co. v. The State of New Hampshire*, 59 Sup. Ct. 438.

to * * * qualifications and maximum hours of service of employees, and safety of operation and equipment," but, according to the opinion of the Court, "Congress by mere grant of power to the Interstate Commerce Commission did not intend to supersede State police regulations established for the protection of the public using State highways." The Commission, as authorized by the act, issued an order establishing certain hours of service for drivers of motor vehicles operated in interstate commerce by contract and common carriers, but this regulation did not become effective until January 31, 1939. The violations of the State act occurred before the order was made, and for this reason it was declared that the regulations of the Commission had not superseded the State act. In this connection, the Court said: "In view of the efforts of governmental authorities everywhere to mitigate the destruction of life, limb, and property resulting from the use of motor vehicles, it cannot be inferred that Congress intended to supersede any State safety measure prior to the taking effect of a Federal measure found suitable to put in its place."

Right of Illegally Employed Minor to Recover for Injuries

A 15-year-old boy who was injured while operating a tractor and plow on a farm was held by the Supreme Court of Kansas to have a right of action against his employer, based on a violation of the State child-labor law.² That act provides that no child under 16 years of age shall be employed in any mine or quarry, or "at any occupation at any place dangerous or injurious to life, limb, health, or morals." It was contended by the employer that the injured boy was not employed in a dangerous place within the meaning of the law, and that the law was "not intended to apply to one engaged in agriculture," since the State legislature enacted at the same session a workmen's compensation act which exempted agricultural employment.

In holding that an action could be maintained because of the violation of the child-labor law, the court declared that danger must be absent from both place and occupation in order to render the law inapplicable. "What the legislature intended to prohibit," it was said, "was employment at any place in any occupation which is dangerous to life, limb, health, or morals of a child under 16 years of age." In answer to the contention that the child-labor law and the workmen's compensation act should be considered together, the court pointed out that the compensation statute dealt with employees in certain defined employments and provided for compensation, and that there were many employments besides agriculture not within the terms of the law. The child-labor act, on the other hand, covers an entirely different field, as it prohibits child labor and does not

² *Kronball v. Garvey*, 84 Pac. (2d) 5.

otherwise attempt to regulate labor. It was therefore the view of the court that the legislature "did not intend by the provisions excepting agricultural pursuits and employments incident thereto from the workmen's compensation act to make such a provision applicable to the child-labor act."

Meaning of "Voluntarily Leaving," As Used in Unemployment-Compensation Act

In a recent case decided by the Superior Court of Pennsylvania, the meaning of the word "voluntarily" as used in the State unemployment-compensation act was determined.³ The statute provides that an employee is ineligible for compensation if his unemployment is due to his "voluntarily leaving work." The claims of two employees were involved in the decision. In one case, the employee resigned because his physician told him that continued employment in his occupation would endanger his health, while in the other case the employee was discharged, but left his employment prior to the effective date of the discharge in order to attempt to secure other work.

In discussing the two cases, the court pointed out that the word "voluntarily" may be used in a number of different ways, but with regard to the purpose and intent of the act, the most appropriate definition is "of one's own motion," so that the expression, "he left work voluntarily," meant that the employee left of his own motion and was not discharged. It was observed also that voluntary leaving is the opposite of a discharge or other action by the employer severing relations with his employees, against which "the act was mainly designed." Finally, the court declared that where the employee, without action by the employer, resigns or quits his employment, this action amounts to voluntarily leaving work, "such as to render him ineligible for unemployment compensation under the act."

For these reasons, the court held that the employee who resigned because of his health was not entitled to compensation, as he quit of his own motion and was not discharged, dismissed, or laid off by his employer. The court said that it was not within the province of the board "to explore the reasons or mental processes which led the claimant to give up his employment." It was pointed out that this would result in too variable and uncertain results, and would be doing violence to the usual and ordinary meaning of the term "voluntarily leaving" in the light of the purpose of the enactment. In the case of the employee who was discharged, but left his employment a few days before the effective date of the discharge, the court held that he was entitled to unemployment compensation from the date the discharge became effective. After stating that the claimant's employ-

³ *Department of Labor and Industry v. Unemployment Compensation Board of Review*, 3 Atl. (2d) 211.

ment was broken or severed as a result of the act of the employer in notifying him that he would be laid off, the court declared that "his leaving a few days in advance of the time fixed for his lay-off, with the employer's full assent, cannot be construed as 'voluntarily leaving work' but only as anticipating by a few days, with the consent of the employer, the effective date of his dismissal."



RELIEF APPROPRIATION OF 1939

TO PROVIDE funds for work relief and direct relief until June 30, 1939, a joint resolution appropriating \$725,000,000 was approved by the President on February 4, 1939 (Pub. Res. No. 1).

The new appropriation supplements the amount designated in the Emergency Relief Appropriation Act of 1938.¹ Of the total amount, the Works Progress Administrator is authorized to expend any amount up to \$15,000,000 for the purpose of providing direct relief for needy persons. An investigation of persons on relief rolls must be made immediately for the purpose of eliminating those not in actual need. However, up to April 1, 1939, the number of employees on Works Progress projects may not be reduced by more than 5 percent. If an emergency should arise which would require the President to submit an estimate for an additional appropriation, the Congress specified that a statement as to the facts constituting the emergency must be given.

Under the terms of the measure, the relief employment of aliens is prohibited and hereafter every relief employee must make an affidavit that he is a citizen of the United States. Preference in employment must be given to needy American citizens who are veterans of certain wars, and then to other needy American citizens or other persons owing allegiance to the United States. There can be no restriction in the employment of persons 65 years of age or over, nor of women with dependent children.

A person refusing an offer of private employment forfeits his right to work relief. However, any person accepting private employment may at the end of such employment return to his previous employment status with the Works Progress Administration, provided he is still in need and did not lose the employment through his own fault.

The amount which may be allocated to other Federal departments and agencies was increased from \$60,000,000 to \$88,000,000. Such funds, however, may not be used for war materials, nor used by any Federal agency for the purpose of establishing mills or factories which would manufacture articles or materials in competition with existing industries.

¹ See Monthly Labor Review, August 1938 (p. 345.)

Political coercion in relief has been prohibited. Any person who offers employment or compensation as a reward for political activity, or who attempts to deprive any person of employment or compensation on account of race, creed, color, or political activity, may be punished by a fine of not more than \$1,000 or imprisonment for not more than 1 year, or both. This provision applies also to all departments and agencies of the Government. In addition, any person employed in an administrative or supervisory capacity and paid from relief funds is forbidden to use official authority or influence for the purpose of interfering with an election or affecting its results.

The measure also prohibits the use of the funds for the payment of the compensation of any civil-service employee. By the terms of an Executive order issued by the President on June 24, 1938, administrative employees of a number of agencies, including the Works Progress Administration, following the taking of a noncompetitive examination, were to be given a civil-service status as of February 1, 1939. The Congress provided that this Executive order would not apply to "positions the compensation of which is payable from appropriations contained in the Emergency Relief Appropriation Act of 1938 or from the amount appropriated in this joint resolution." It was also provided that such appropriations could not be made available for the paying of an incumbent of a position placed in the competitive classified civil service of the United States after January 10, 1939.



PROHIBITION OF DISCHARGE IN ARGENTINA BECAUSE OF MARRIAGE

AN EMPLOYEE discharged on account of marriage must be paid an indemnity of not less than 1 year's salary,¹ under a law promulgated in Argentina on October 7, 1938.¹ The right to this compensation does not preclude claims for damages under the common law or any special laws.

Business organizations holding public-service concessions and civil and commercial organizations of any kind, are prohibited from making internal regulations or labor contracts or agreements which provide for dismissal of employees because of marriage, and such acts are null and void. Violation of this provision is punishable by a fine of 1,000 to 10,000 pesos for each infraction, and in case of repetition of the offense the maximum penalty is doubled. Fines so collected are to be paid into the Institute of the National Education Council or to the provincial councils.

Domestic servants are not covered by the provisions of this law.

¹U. S. Bureau of Foreign and Domestic Commerce. Division of Commercial Laws. Comparative Law Series, January 1939 (p. 42).

Industrial Disputes

TREND OF STRIKES

IN JANUARY 1939 there was a 17-percent increase in the number of strikes, according to preliminary estimates as compared with December 1938. There were increases of about 70 percent in number of workers involved and about 35 percent in man-days idle during January. The large increase in number of workers involved was accounted for principally by the short strike of several thousand taxicab drivers in New York City from January 3 to 6.

As compared with January a year ago, the preliminary estimates indicate increases in January 1939 of 9 percent in number of strikes, 56 percent in number of workers involved, and 34 percent in man-days of idleness.

The preliminary estimates given in the accompanying table for December and January are based on newspaper reports and other information available as this goes to press. An analysis of strikes in each of these months, based on detailed and verified information, will appear in subsequent issues of the Monthly Labor Review.

Trend of Strikes, 1933 to January 1939¹

Year and month	Number of strikes					Workers involved in strikes		Man-days idle during month or year
	Continued from preceding month	Beginning in month or year	In progress during month	Ended in month	In effect at end of month	Beginning in month or year	In progress during month	
1933.....		1,695				1,168,272		16,872,128
1934.....		1,856				1,466,695		19,501,949
1935.....		2,014				1,117,213		15,456,337
1936.....		2,172				788,648		13,901,956
1937.....		4,740				1,860,621		28,424,857
<i>1937</i>								
January.....	100	171	271	132	139	108,621	214,268	2,720,281
February.....	139	211	350	204	146	99,335	226,329	1,491,268
March.....	146	614	760	510	250	290,324	358,155	3,288,976
April.....	250	535	785	512	273	221,572	394,178	3,377,223
May.....	273	604	877	547	330	325,499	445,170	2,982,735
June.....	330	610	940	582	358	281,478	474,954	4,998,408
July.....	358	472	830	533	297	143,678	353,682	3,007,819
August.....	297	449	746	451	295	143,033	238,828	2,270,380
September.....	295	361	656	393	263	88,967	160,241	1,449,948
October.....	263	320	583	378	205	67,242	127,109	1,181,914
November.....	205	262	467	265	202	68,929	118,632	981,697
December.....	202	131	333	213	120	21,943	60,518	674,205

Footnotes at end of table.

Trend of Strikes, 1933 to January 1939¹—Continued

Year and month	Number of strikes					Workers involved in strikes		Man-days idle during month or year
	Continued from preceding month	Beginning in month or year	In progress during month	Ended in month	In effect at end of month	Beginning in month or year	In progress during month	
1938								
January.....	120	156	276	159	117	35,251	55,772	476,988
February.....	117	178	295	170	125	52,446	76,608	504,985
March.....	125	247	372	215	157	55,534	104,100	750,756
April.....	157	247	404	236	168	77,167	109,062	822,428
May.....	168	265	433	265	168	80,867	121,800	1,145,027
June.....	168	194	362	216	146	51,931	93,397	838,747
July.....	146	178	324	180	144	48,104	82,194	750,617
August.....	144	219	363	222	141	45,663	77,347	806,564
September.....	141	185	326	202	124	93,403	129,588	969,165
October.....	124	199	323	191	132	50,012	108,851	817,378
November.....	132	167	299	195	104	37,770	68,605	503,513
December ¹	104	145	249	149	100	32,000	51,000	475,000
1939								
January ¹	100	170	270	165	105	55,000	75,000	640,000

¹ Strikes involving fewer than 6 workers or lasting less than 1 day are not included in this table nor in the following tables. Notices or leads regarding strikes are obtained by the Bureau from more than 650 daily papers, labor papers, and trade journals as well as from all Government labor boards. Letters are written to representatives of parties in the disputes asking for detailed and authentic information. Since answers to some of these letters have not yet been received, the figures given for the late months are not final. This is particularly true with regard to figures for the last 2 months, and these should be considered as preliminary estimates.

ANALYSIS OF STRIKES IN NOVEMBER 1938¹

Strike activity in November 1938 was considerably less than in the preceding months of the fall and summer. Detailed information was obtained on 167 strikes which began in November, involving somewhat fewer than 38,000 workers. The following analysis is based on these strikes, plus 132 which continued into November from preceding months, making a total of 299 strikes in progress during the month, involving nearly 69,000 workers and resulting in more than a half-million man-days idle in November.

The industry groups affected by the greatest number of new strikes in November were trade (27), textiles (20), food (15), building and construction (13), lumber and allied products (12), and domestic and personal service (12). The strikes in these six groups accounted for about 60 percent of all strikes beginning in November. There were more workers involved, by far, in the automobile-manufacturing industry than in any other. This was due principally to short stoppages at the Chevrolet Gear & Axle plant and the Plymouth plant, both in Detroit. The industry groups with the most man-days of idleness because of strikes in November were lumber and allied products (96,000),

¹ Detailed information on a few strikes has not yet been received. (See footnote to preceding table.) Data on missing strikes will be included in the annual report.

textiles (74,000), trade (52,000), machinery manufacturing (47,000), and transportation and communication (46,000). The large amount of idleness in the lumber group was due principally to the dispute at the Bloedel Donovan Lumber Mills at Bellingham, Wash., and the dispute at two Portland, Oreg., furniture plants. Both of these disputes began prior to November and both were still in progress at the end of the month.

TABLE 1.—*Strikes and Lock-Outs in November 1938, by Industry*

Industry	Beginning in November		In progress during November		Mandays idle during November
	Number	Workers involved	Number	Workers involved	
All industries.....	167	37, 770	299	68, 605	503, 513
Iron and steel and their products, not including machinery.....	8	807	15	1, 936	20, 288
Cutlery (not including silver and plated cutlery), and edge tools.....	1	92	1	92	828
Hardware.....			1	374	4, 862
Steam and hot-water heating apparatus and steam fittings.....	2	414	2	414	2, 604
Stoves.....	1	110	2	140	740
Structural and ornamental metal work.....	1	28	2	81	1, 449
Tin cans and other tinware.....			1	186	744
Wire and wire products.....			2	465	7, 605
Other.....	3	163	4	184	1, 436
Machinery, not including transportation equipment.....	9	2, 899	17	4, 953	47, 193
Electrical machinery, apparatus, and supplies.....	5	1, 151	6	1, 218	3, 828
Foundry and machine-shop products.....	2	312	5	1, 644	19, 627
Radios and phonographs.....			2	585	5, 184
Other.....	2	1, 436	4	1, 506	18, 554
Transportation equipment.....	5	16, 133	6	17, 156	42, 040
Automobiles, bodies and parts.....	5	16, 133	5	16, 133	37, 948
Shipbuilding.....			1	1, 023	4, 092
Nonferrous metals and their products.....	3	876	4	914	4, 542
Lighting equipment.....			1	38	570
Silverware and plated ware.....	1	36	1	36	612
Other.....	2	840	2	840	3, 360
Lumber and allied products.....	12	1, 087	25	5, 647	95, 809
Furniture.....	6	321	16	2, 672	46, 838
Sawmills and logging camps.....	3	670	5	2, 823	46, 927
Other.....	3	96	4	152	2, 044
Stone, clay, and glass products.....			3	575	4, 780
Brick, tile, and terra cotta.....			2	165	3, 960
Other.....			1	410	820
Textiles and their products.....	20	3, 048	36	5, 944	74, 321
Fabrics:					
Carpets and rugs.....	2	750	2	750	750
Cotton goods.....			2	1, 125	15, 500
Cotton small wares.....	1	9	3	24	372
Dyeing and finishing textiles.....			1	19	399
Silk and rayon goods.....	1	200	1	200	400
Woolen and worsted goods.....	1	44	1	44	440
Other.....	1	18	2	88	860
Wearing apparel:					
Clothing, men's.....	1	26	4	310	2, 404
Clothing, women's.....	8	1, 050	13	1, 133	11, 397
Men's furnishings.....	1	12	1	12	24
Hats, caps, and millinery.....	1	391	1	391	6, 647
Shirts and collars.....	1	304	2	1, 004	20, 780
Hosiery.....	1	33	1	33	693
Knitgoods.....	1	211	1	211	1, 055
Other.....			1	600	12, 600
Leather and its manufactures.....	1	78	3	520	7, 184
Boots and shoes.....	1	78	3	520	7, 184

TABLE I.—*Strikes and Lock-Outs in November 1938, by Industry—Continued*

Industry	Beginning in November		In progress during November		Man-days idle during November
	Number	Workers involved	Number	Workers involved	
Food and kindred products	15	3,245	20	3,860	16,146
Baking.....	2	50	3	72	299
Beverages.....	1	18	1	18	36
Butter.....	1	21	1	21	147
Canning and preserving.....	1	16	2	152	1,296
Confectionery.....	2	122	4	204	642
Slaughtering and meat packing.....	5	2,865	6	3,240	13,232
Other.....	3	153	3	153	494
Tobacco manufactures			2	1,675	2,710
Chewing and smoking tobacco and snuff.....			1	1,035	2,070
Cigars.....			1	640	640
Paper and printing	4	68	7	609	13,244
Boxes, paper.....	2	49	3	58	374
Printing and publishing: Newspapers and periodicals.....	2	19	3	519	12,582
Other.....			1	32	288
Chemicals and allied products	4	422	4	422	3,988
Chemicals.....	1	135	1	135	405
Fertilizers.....	1	205	1	205	2,665
Other.....	2	82	2	82	918
Rubber products	2	659	4	1,361	13,302
Rubber tires and inner tubes.....	1	571	1	571	2,292
Other rubber goods.....	1	88	3	790	11,010
Miscellaneous manufacturing	6	326	15	932	5,526
Electric light, power and manufactured gas.....	1	94	3	370	1,083
Broom and brush.....	1	43	1	43	473
Furriers and fur factories.....	1	15	3	39	183
Other.....	3	174	8	480	3,787
Extraction of minerals	3	651	5	1,329	15,030
Coal mining, bituminous.....	2	611	3	1,076	10,437
Metalliferous mining.....	1	40	1	40	120
Other.....			1	213	4,473
Transportation and communication	8	1,573	17	4,752	45,774
Water transportation.....	1	150	2	258	1,074
Motortruck transportation.....	5	1,250	11	4,257	43,611
Motorbus transportation.....			1	34	408
Taxicabs and miscellaneous.....	1	73	2	103	481
Telephone and telegraph.....	1	100	1	100	200
Trade	27	3,106	46	7,767	51,886
Wholesale.....	10	1,734	14	1,830	13,285
Retail.....	17	1,372	32	5,937	38,601
Domestic and personal service	12	526	21	779	5,491
Hotels, restaurants, and boarding houses.....	7	372	11	475	1,614
Laundries.....	5	154	7	209	1,598
Dyeing, cleaning, and pressing.....			3	95	2,279
Professional service	5	186	7	261	3,388
Recreation and amusement.....	4	178	5	191	2,454
Semiprofessional, attendants, and helpers.....	1	8	2	70	934
Building and construction	13	462	29	973	5,979
Buildings, exclusive of P. W. A.....	6	161	15	367	3,190
All other construction (bridges, docks, etc., and P. W. A. buildings).....	7	301	14	606	2,789
Agriculture and fishing	4	822	5	2,822	7,534
Agriculture.....	3	672	4	2,672	6,484
Fishing.....	1	150	1	150	1,050
W. P. A., relief, and resettlement projects	1	150	2	2,750	6,650
Other nonmanufacturing industries	5	646	6	668	10,708

States experiencing the most new strikes during November were New York (49), Pennsylvania (19), and New Jersey (18). California, Illinois, Massachusetts, and Ohio had 7 each. Only 3 States had as many as 3,000 workers involved in new strikes during the month. These were Michigan (16,133), New York (7,033), and Illinois (3,208). The States with the most man-days idle because of strikes during the month were New York (95,000), Pennsylvania (50,000), Washington (44,000), Michigan (38,000), and Oregon (32,000).

Two of the 167 strikes beginning in November extended into two or more States. One was a strike at terminals of auto transport companies in Kansas, Ohio, and Texas. The other was a strike against a retail fuel company in Washington, D. C., and nearby Maryland and Virginia.

TABLE 2.—*Strikes in November 1938, by States*

State	Beginning in November		In progress during November		Man-days idle during November
	Number	Workers involved	Number	Workers involved	
All States.....	167	37,770	299	68,605	503,513
Alabama.....	5	1,068	8	1,614	17,761
Arkansas.....	1	39	1	39	273
California.....	7	552	16	6,433	23,712
Colorado.....	1	75	1	75	1,125
Connecticut.....	5	897	5	897	9,437
District of Columbia.....	2	40	2	40	470
Florida.....	2	472	3	490	1,520
Idaho.....			1	27	405
Illinois.....	7	3,208	14	4,081	23,446
Indiana.....	5	347	10	1,318	17,802
Iowa.....			2	1,375	13,375
Kentucky.....	1	94	1	94	282
Louisiana.....	3	260	4	604	6,584
Maine.....			1	400	5,600
Maryland.....	4	847	4	847	5,153
Massachusetts.....	7	530	9	693	3,321
Michigan.....	5	16,133	7	16,222	38,126
Minnesota.....	2	26	5	101	1,770
Missouri.....	2	137	4	574	3,544
Nebraska.....			1	46	1,150
New Jersey.....	18	1,542	27	3,897	26,182
New Mexico.....	1	435	1	435	3,480
New York.....	49	7,023	95	9,783	94,752
North Carolina.....			2	89	867
Ohio.....	7	844	13	4,669	14,803
Oklahoma.....			1	209	2,090
Oregon.....	1	35	2	1,544	31,724
Pennsylvania.....	19	2,100	32	3,991	49,814
Rhode Island.....	1	35	2	53	438
South Carolina.....			1	625	5,000
Tennessee.....			2	325	4,450
Texas.....	5	123	5	123	509
Virginia.....	1	73	2	80	299
Washington.....	2	255	5	2,444	44,051
West Virginia.....	1	13	1	13	39
Wisconsin.....	1	300	5	2,144	21,810
Interstate.....	2	267	4	2,211	28,344

There was an average of 226 workers involved in the 167 strikes beginning in November. Two-thirds of the strikes involved fewer than 100 workers each, 28 percent of them involved from 100 to 1,000 workers each, and 5 percent involved 1,000 or more workers

each. The only strikes involving as many as 5,000 workers were the two in the automobile industry referred to before.

TABLE 3.—*Strikes Beginning in November 1938, Classified by Number of Workers Involved*

Industry group	Total	Number of strikes in which the number of workers involved was—					
		6 and under 20	20 and under 100	100 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000
All industries.....	167	40	73	39	7	6	2
<i>Manufacturing</i>							
Iron and steel and their products, not including machinery.....	8	1	4	3			
Machinery, not including transportation equipment.....	9		3	5		1	
Transportation equipment.....	5				1	2	2
Nonferrous metals and their products.....	3		1	2			
Lumber and allied products.....	12	2	7	3			
Textiles and their products.....	20	5	6	8	1		
Leather and its manufactures.....	1		1				
Food and kindred products.....	15	4	8	1		2	
Paper and printing.....	4	3	1				
Chemicals and allied products.....	4	1	1	2			
Rubber products.....	2		1		1		
Miscellaneous manufacturing.....	6	1	5				
<i>Nonmanufacturing</i>							
Extraction of minerals.....	3		2		1		
Transportation and communication.....	8	2	2	3		1	
Trade.....	27	8	12	4	3		
Domestic and personal service.....	12	7	4	1			
Professional service.....	5	2	2	1			
Building and construction.....	13	3	10				
Agriculture and fishing.....	4		1	3			
W. P. A., relief, and resettlement projects.....	1			1			
Other nonmanufacturing industries.....	5	1	2	2			

In 63 percent of the strikes beginning in November, including 52 percent of the workers involved, the major issues were recognition, closed shop, discrimination, or other matters related to union organization. (Wages and hours were also involved in many of these cases.) Wages and hours were the major issues in 21 percent of the strikes. About 30 percent of the total workers were in this group.

In 16 percent of the strikes, including 18 percent of the workers, the major issues were miscellaneous matters including sympathy strikes, union rivalry, jurisdiction, and various grievances over such questions as delayed pay, medical examinations, vacations, and protests against certain disciplinary methods.

TABLE 4.—Major Issues Involved in Strikes Beginning in November 1938

Major issues	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All issues.....	167	100.0	37,770	100.0
Wages and hours.....	35	21.0	11,296	29.9
Wage increase.....	20	12.0	7,673	20.3
Wage decrease.....	9	5.4	2,440	6.5
Wage increase, hour decrease.....	5	3.0	883	2.3
Hour decrease.....	1	.6	300	.8
Union organization.....	105	62.8	19,579	51.9
Recognition.....	13	7.8	2,241	5.9
Recognition and wages.....	31	18.4	5,730	15.2
Recognition, wages and hours.....	30	18.0	1,997	5.3
Closed shop.....	18	10.8	1,928	5.1
Discrimination.....	11	6.6	860	2.3
Other.....	2	1.2	6,823	18.1
Miscellaneous.....	27	16.2	6,895	18.2
Sympathy.....	3	1.8	1,799	4.7
Rival unions or factions.....	6	3.6	824	2.2
Jurisdiction.....	1	.6	175	.5
Other.....	17	10.2	4,097	10.8

Of the 299 strikes in progress during November, 1938, or 65 percent, were terminated during the month with an average duration of 23 calendar days. About one-third of these strikes were ended in less than a week after they began; 48 percent lasted from a week up to a month; and 19 percent had been in progress for a month or more. Seven strikes in the latter group (about 4 percent of the total) had been in progress for 3 months or more when they were terminated. Practically all of these were small strikes against individual firms and none of them involved as many as 500 workers.

TABLE 5.—Duration of Strikes Ending in November 1938

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than 1½ month	1½ and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries.....	195	64	46	48	23	7	7
<i>Manufacturing</i>							
Iron and steel and their products, not including machinery.....	8	2	3	3			
Machinery, not including transportation equipment.....	12	4	1	3	1	2	1
Transportation equipment.....	5	5					
Nonferrous metals and their products.....	3	1		1		1	
Lumber and allied products.....	18	5	6	5	1	1	
Stone, clay, and glass products.....	1						1
Textiles and their products.....	21	5	6	6	4		
Leather and its manufactures.....	2		1		1		
Food and kindred products.....	14	9	1	1	2		1
Tobacco manufactures.....	2				1		1
Paper and printing.....	4	1	2	1			
Chemicals and allied products.....	2	1		1			
Rubber products.....	2		1		1		
Miscellaneous manufacturing.....	10	3	4	2		1	
<i>Nonmanufacturing</i>							
Extraction of minerals.....	2	2					
Transportation and communication.....	13	4	1	6	2		
Trade.....	28	7	8	7	2	2	2
Domestic and personal service.....	13	7	2	1	2		1
Professional service.....	5	1	1	3			
Building and construction.....	22	3	8	8	3		
Agriculture and fishing.....	2		1		1		
W. P. A., relief, and resettlement projects.....	2	1			1		
Other nonmanufacturing industries.....	4	3			1		

Government officials or boards assisted in negotiating settlements of about 45 percent of the strikes ending in November 1938. These strikes included approximately 35 percent of the total workers involved. About 35 percent of the strikes, including 18 percent of the workers, were settled through negotiations directly between the employers and representatives of organized workers.

About 17 percent of the strikes, including 26 percent of the total workers involved, were terminated without formal settlements. In most of these cases the strikers simply dropped their demands and returned to work without settlements or they lost their jobs entirely when employers replaced them with new workers, moved, or went out of business.

TABLE 6.—*Methods of Negotiating Settlements of Strikes Ending in November 1938*

Negotiations toward settlements carried on by--	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	195	100.0	49,416	100.0
Employers and workers directly.....	3	1.5	88	.2
Employers and representatives of organized workers directly.....	69	35.4	9,081	18.4
Government officials or boards.....	87	44.7	17,118	34.6
Private conciliators or arbitrators.....	2	1.0	9,883	20.0
Terminated without formal settlement.....	33	16.9	13,046	26.4
Not reported.....	1	.5	200	.4

Forty-two percent of the strikes ending in November, including 27 percent of the workers involved, resulted in substantial gains to the workers. About 31 percent of the strikes, including 43 percent of the workers involved, resulted in partial gains or compromises, and in 20 percent of the strikes the 24 percent of the workers involved gained little or nothing.

TABLE 7.—*Results of Strikes Ending in November 1938*

Results	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	195	100.0	49,416	100.0
Substantial gains to workers.....	82	42.0	13,196	26.7
Partial gains or compromises.....	61	31.3	21,318	43.1
Little or no gains to workers.....	38	19.5	11,837	24.0
Jurisdiction, rival union or faction settlements.....	8	4.1	580	1.2
Indeterminate.....	5	2.6	2,285	4.6
Not reported.....	1	.5	200	.4

Of the 195 strikes ending in November, about 19 percent were principally over wages and hours, and 64 percent were over union-organization matters. From the viewpoint of the workers involved, the union-

organization strikes were more successful than the strikes over wages and hours. Of the strikes over union-organization issues, the workers substantially won their demands in 47 percent, obtained compromise settlements in 33 percent, and in 20 percent gained little or nothing. Of the wage-and-hour strikes the workers won 46 percent, compromised 24 percent, and in 24 percent gained little or nothing.

Of the 25,377 workers involved in the strikes over union-organization matters, 40 percent won substantially all of their demands, 54 percent obtained compromise settlements, and 6 percent gained little or nothing.

Of the 13,273 workers involved in the strikes over wages and hours, 20 percent substantially won their demands, 12 percent obtained compromise settlements, and 66 percent gained little or nothing.

TABLE 8.—Results of Strikes Ending in November 1938, in Relation to Major Issues Involved

Major issues	Total	Strikes resulting in--					
		Substan- tial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdic- tion, rival union, or faction settle- ments	Indeter- minate	Not re- ported
Number of strikes							
All issues.....	195	82	61	38	8	5	1
Wages and hours.....	37	17	9	9		1	1
Wage increase.....	20	6	6	7		1	
Wage decrease.....	9	5	2	2			
Wage increase, hour de- crease.....	7	5	1				1
Hour decrease.....	1	1					
Union organization.....	125	59	41	25			
Recognition.....	18	7	3	8			
Recognition and wages.....	33	18	10	5			
Recognition and hours.....	1	1					
Recognition, wages, and hours.....	35	16	13	6			
Closed shop.....	24	12	8	4			
Discrimination.....	7	3	3	1			
Other.....	7	2	4	1			
Miscellaneous.....	33	6	11	4	8	4	
Sympathy.....	3			1		2	
Rival unions or factions.....	7				7		
Jurisdiction.....	1				1		
Other.....	22	6	11	3		2	
Number of workers involved							
All issues.....	49,416	13,196	21,318	11,837	580	2,285	200
Wages and hours.....	13,273	2,618	1,565	8,810		80	200
Wage increase.....	10,027	1,327	395	8,225		80	
Wage decrease.....	2,525	832	1,108	585			
Wage increase, hour de- crease.....	421	159	62				200
Hour decrease.....	300	300					

TABLE 8.—Results of Strikes Ending in November 1938, in Relation to Major Issues Involved—Continued

Major issues	Total	Strikes resulting in--					Indeter- minate	Not re- ported
		Substan- tial gains to workers	Partial gains or compro- mises	Little or no gains to workers	Jurisdic- tion, rival union, or faction settle- ments			
Number of workers involved--Continued								
Union organization.....	25,377	10,133	13,602	1,642				
Recognition.....	3,585	464	1,814	1,307				
Recognition and wages.....	4,973	3,558	1,335	80				
Recognition and hours.....	70	70						
Recognition, wages, and hours.....	2,645	1,154	1,378	113				
Closed shop.....	3,369	1,569	1,692	108				
Discrimination.....	711	158	531	22				
Other.....	10,024	3,160	6,852	12				
Miscellaneous.....	10,766	445	6,151	1,385	580	2,205		
Sympathy.....	1,799			24		1,775		
Rival unions or factions.....	560				560			
Jurisdiction.....	20				20			
Other.....	8,387	445	6,151	1,361		430		

ACTIVITIES OF THE UNITED STATES CONCILIATION SERVICE, JANUARY 1939

THE United States Conciliation Service disposed of 332 situations involving 76,921 workers, during January 1939.

Labor disputes consisting of strikes, threatened strikes, lockouts, and controversies accounted for 129 situations that involved 68,987 workers. The remaining 203 situations, involving 7,934 workers, are classified as "other situations" and included requests for information, arbitrations, complaints, conferences regarding labor conditions, etc.

Employees and employers in 37 States, the District of Columbia, and Alaska, used the services of this agency during January (table 1).

The facilities of the Service were used in 24 major industrial fields, such as automobiles, food, iron and steel, textiles, etc. (table 2).

TABLE 1.—Situations Disposed of by U. S. Conciliation Service, by States, January 1939

State	Disputes		Other situations		Total	
	Num- ber	Workers involved	Num- ber	Workers involved	Num- ber	Workers involved
All States.....	129	68,987	203	7,934	332	76,921
Alabama.....	5	1,720	6	6	11	1,736
Alaska.....	1		1	1	1	1
Arkansas.....	1	120	1	1	2	121
Canada.....	2		2	2	2	2
California.....	9	5,788	19	36	28	5,824
Colorado.....			2	501	2	501
Connecticut.....	1	550	4	5	5	555
District of Columbia.....	10	470	22	115	32	585
Florida.....			3	67	3	67

TABLE 1.—Situations Disposed of by U. S. Conciliation Service, by States, January 1939—Continued

State	Disputes		Other situations		Total	
	Num-ber	Workers involved	Num-ber	Workers involved	Num-ber	Workers involved
Georgia.....	2	406			2	406
Illinois.....	10	2,473	8	18	18	2,491
Indiana.....	4	840	8	530	12	1,370
Iowa.....	2	83	2	2	4	85
Kansas.....	1	18	2	2	3	20
Kentucky.....	4	554	4	4	8	558
Louisiana.....	1	9	1	1	2	10
Maine.....	1	125			1	125
Maryland.....			2	2	2	2
Massachusetts.....	3	1,668	3	3	6	1,671
Michigan.....	4	27,600	9	208	13	27,808
Minnesota.....	4	1,278	1	20	5	1,298
Missouri.....	1	220	3	6	4	226
Montana.....	1	30	1	1	2	31
New Hampshire.....	1	165	2	2	3	167
New Jersey.....	9	1,096	9	9	18	1,105
New York.....	11	5,553	22	937	33	6,490
North Carolina.....	1	575	10	2,356	11	2,931
Ohio.....	9	6,506	14	28	23	6,534
Oklahoma.....	1	8	1	1	2	9
Oregon.....	2	1,550	3	3	5	1,553
Pennsylvania.....	22	8,014	12	115	34	8,129
Rhode Island.....	1	35	1	2,000	2	2,035
South Carolina.....			5	840	5	840
Tennessee.....	2	50	3	3	5	53
Texas.....	1	22	5	10	6	32
Utah.....	1	135			1	135
Virginia.....	1	165	2	2	3	167
Washington.....	2	1,149	4	85	6	1,234
West Virginia.....			5	5	5	5
Wisconsin.....	1	12	1	7	2	19

TABLE 2.—Situations Disposed of by U. S. Conciliation Service, by Industries, January 1939

Industry	Disputes		Other situations		Total	
	Num-ber	Workers involved	Num-ber	Workers involved	Num-ber	Workers involved
All industries.....	129	68,987	203	7,934	332	76,921
Agriculture.....	3	920	4	901	7	1,821
Automobile.....	12	28,364	2	21	14	28,385
Building trades.....	11	1,675	21	33	32	1,708
Chemicals.....	2	177	4	8	6	185
Communications.....	1	21	2	2	3	23
Domestic and personal.....	6	254	6	43	12	297
Food.....	19	6,592	15	325	34	6,917
Iron and steel.....	11	6,568	9	617	20	7,185
Leather.....	3	1,591	4	4	7	1,595
Lumber:						
Furniture.....	5	1,927	2	2	7	1,929
Other.....	6	2,211	4	4	10	2,215
Machinery.....	5	2,276	9	341	14	2,617
Maritime.....	4	3,920	6	11	10	3,931
Mining.....	2	368	2	2	4	370
Motion pictures.....	1	1,500	2	2	3	1,502
Paper and printing.....	2	2,545	4	4	6	2,549
Petroleum.....	2	20	4	10	6	30
Professional.....			2	3	2	3
Stone, clay, and glass.....	5	632	2	2	7	634
Textile:						
Cotton.....	2	805	10	2,636	12	3,441
Other.....	11	3,946	15	2,573	26	6,519
Tobacco.....	2	1,210			2	1,210
Trade.....	8	671	4	7	12	678
Transportation.....	6	794	11	11	17	805
Utilities.....			3	3	3	3
Unclassified.....			56	369	56	369

National Income

NATIONAL INCOME, 1929 TO 1937

REVISED estimates of national income for 1937, with comparative data for 1929-37, show a rise from \$63,466,000,000 in 1936 to \$69,817,000,000 in 1937. The national income or "income produced" minus business savings (earnings not currently distributed to stockholders or other proprietors of business enterprises) equals "income paid out," which rose from \$62,586,000,000 in 1936 to \$69,330,000,000 in 1937.¹

The concepts of income developed by the Bureau of Foreign and Domestic Commerce in making these estimates are conveniently summarized by the Bureau as follows:

National income or income produced equals—

Gross income of all producing units.

Minus raw materials consumed by all producing units.

Minus depreciation and obsolescence (capital equipment consumed by all producing units).

Income paid out equals—

National income.

Minus business savings.

Income payments to individuals equals—

Income paid out.

Minus employer and employee contributions to Social Security programs.

Minus employer and employee contributions to the Federal Government employees' retirement plan.

Minus contributions under the Railroad Retirement Act.

Plus direct-relief and public-assistance disbursements.

Plus Social Security benefits.

Plus Federal Government retirement plan payments.

Plus Railroad Retirement Act payments.

Plus payments to veterans on adjusted service certificates.

The largest item of income payments, described as "total compensation of employees," includes salaries, wages, work-relief pay rolls, social security contributions of employers, pensions, and workmen's compensation payments. Other items of income paid out are dividends and interest, entrepreneurial withdrawals,² and net rents and royalties.

¹ U. S. Department of Commerce. Bureau of Foreign and Domestic Commerce. Income in the United States, 1929-37, by Robert R. Nathan. Washington, 1938.

² Defined by the Bureau as "the amounts which employers and self-employed individuals withdraw from their business enterprises as compensation for their own efforts." This type of income paid out is characteristic of unincorporated enterprises including farming, and estimates are described as being "subject to both statistical and theoretical difficulties."

TABLE 1.—National Income Paid Out, by Type of Payment

Item	1929	1930	1931	1932	1933	1934	1935	1936	1937
Amount (in millions of dollars)									
Total income paid out.....	78,556	73,290	62,032	49,024	45,317	51,510	55,137	62,586	69,330
Total compensation of employees.....	51,509	47,551	40,188	31,563	29,596	34,051	36,679	41,906	46,728
Salaries (selected industries) ¹	5,606	5,645	4,694	3,423	2,947	3,379	3,574	3,936	4,593
Wages (selected industries) ¹	17,093	14,214	10,585	7,243	7,271	9,019	10,218	11,909	14,037
Salaries and wages (all other industries).....	27,873	26,706	23,827	19,798	17,746	19,258	20,433	22,226	24,197
Work-relief wages ²					669	1,489	1,430	2,462	1,860
Social Security contributions of employers.....						3	7	292	923
Other labor income.....	937	986	1,081	1,099	964	903	1,017	1,081	1,117
Total dividends and interest ³	11,331	11,396	9,913	8,017	7,088	7,748	7,812	8,881	9,563
Dividends.....	5,978	5,801	4,335	2,745	2,209	2,793	3,038	4,284	5,010
Interest.....	5,202	5,393	5,295	5,019	4,710	4,862	4,725	4,652	4,556
Entrepreneurial withdrawals.....	12,296	11,581	9,848	7,887	7,214	8,021	8,729	9,565	10,441
Net rents and royalties.....	3,419	2,763	2,083	1,558	1,418	1,690	1,917	2,234	2,559
Percentages of 1929									
Total income paid out.....	100.0	93.3	79.0	62.4	57.7	65.6	70.2	79.7	88.3
Total compensation of employees.....	100.0	92.3	78.0	61.3	57.5	66.1	71.2	81.4	90.7
Salaries (selected industries) ¹	100.0	100.7	83.7	61.1	52.6	60.3	63.8	70.2	81.9
Wages (selected industries) ¹	100.0	83.2	61.9	42.4	42.5	52.8	59.8	69.7	82.1
Salaries and wages (all other industries).....	100.0	95.8	85.5	71.0	63.7	69.1	73.3	79.7	86.8
Work-relief wages ²									
Social Security contributions of employers.....	100.0	105.2	115.4	117.3	102.9	96.4	108.5	115.4	119.2
Other labor income.....	100.0	100.6	87.5	70.8	62.6	68.4	68.9	78.4	84.4
Total dividends and interest ³	100.0	97.0	72.5	45.9	37.0	46.7	50.8	71.7	83.8
Dividends.....	100.0	103.7	101.8	96.5	90.5	93.5	90.8	89.4	89.5
Interest.....	100.0	94.2	80.1	64.1	58.7	65.2	71.0	77.8	84.9
Entrepreneurial withdrawals.....	100.0	80.8	60.9	45.6	41.5	49.4	56.1	65.3	76.0
Net rents and royalties.....	100.0	97.5	89.1	80.2	76.2	79.1	81.1	82.1	84.7
Bureau of Labor Statistics cost-of-living index.....									

¹ Includes mining, manufacturing, construction, steam railroads, Pullman, railway express, and water transportation.

² Includes pay rolls and maintenance of Civilian Conservation Corps employees and pay rolls of Civil Works Administration, Federal Emergency Relief Administration, and the Federal Works Program projects plus administrative pay rolls outside of Washington, D. C., for all except the Federal Works Program. Area office employees and their pay rolls under the Federal Works Program are included with the regular Federal Government employment and pay-roll figures.

³ Includes also net balance of international flow of property incomes.

The total compensation of employees in 1937, as defined in the estimates of income, was 90.7 percent of the 1929 total, while all income paid out in 1937 was 88.3 percent of the 1929 total. Between 1929 and 1937 there was a significant change in the items forming employee compensation. Total compensation of employees in 1937 was 9.3 percent smaller than in 1929, but items described as "other labor income," such as pensions and workmen's compensation payments, were 19.2 percent larger than in 1929. Social security contributions of employers, beginning in 1934, rose to \$923,000,000 in 1937. Work-relief wages, beginning in 1933, totaled \$1,860,000,000 in 1937. A significant portion of work-relief wages went to farmers, members of professions; and young persons not normally in the wage-earning and salaried groups, and thus there was an expansion of employee compensation not connected with the normal distribution of income to wage-earning and salaried groups.

In many employments, it is not possible to distinguish between wage earners and salaried employees. It is possible, however, to

differentiate the two types of workers in manufacturing, mining, and contract construction, and also to compare the various forms of income paid out in these industrial groups. (See table 2.)

TABLE 2.—Total Income Paid Out, Wages, Salaries, and Dividends and Interest¹ in Manufacturing, Mining, and Contract Construction, 1929-37

Item	Manufacturing, mining, and contract construction											
	Amount (in millions of dollars)						Index numbers (1929=100)					
	1929	1932	1933	1934	1936	1937	1929	1932	1933	1934	1936	1937
Total income paid out.....	23,257	10,687	10,145	12,481	17,027	20,193	100.0	46.0	43.6	53.7	73.2	86.8
Wages.....	14,383	5,910	5,997	7,621	10,115	12,058	100.0	41.1	41.7	53.0	70.3	83.8
Salaries.....	4,617	2,784	2,383	2,767	3,240	3,833	100.0	60.3	51.6	59.9	70.2	83.0
Dividends and interest.....	3,277	1,462	1,331	1,657	(²)	(²)	100.0	44.6	40.6	50.6	(²)	(²)
Manufacturing												
Total income paid out.....	18,014	8,553	8,454	10,489	14,286	16,948	100.0	47.5	46.9	58.2	79.3	94.1
Wages.....	10,790	4,558	4,906	6,319	8,346	9,950	100.0	42.2	45.5	58.6	77.3	92.2
Salaries.....	3,980	2,444	2,128	2,493	2,886	3,431	100.0	61.4	53.5	62.6	72.5	86.2
Dividends and interest.....	2,785	1,308	1,190	1,483	(²)	(²)	100.0	47.0	42.7	53.2	(²)	(²)
Mining												
Total income paid out.....	1,969	821	817	1,110	1,407	1,611	100.0	41.7	41.5	56.4	71.5	81.8
Wages.....	1,347	563	577	771	938	1,065	100.0	41.8	42.8	57.2	69.6	79.1
Salaries.....	161	100	94	110	120	132	100.0	62.1	58.4	68.3	74.5	82.0
Dividends and interest.....	411	119	111	152	(²)	(²)	100.0	29.0	27.0	37.0	(²)	(²)
Contract construction												
Total income paid out.....	3,274	1,313	874	882	1,334	1,634	100.0	40.1	26.7	26.9	40.7	49.9
Wages.....	2,246	789	514	531	831	1,043	100.0	35.1	22.9	23.6	37.0	46.4
Salaries.....	476	240	161	164	234	270	100.0	50.4	33.8	34.5	49.2	56.7
Dividends and interest.....	81	35	30	22	(²)	(²)	100.0	43.2	37.0	27.2	(²)	(²)

¹ Interest on long-term obligations only. Interest received by corporations is deducted from interest paid by corporations to arrive at net interest originating in corporations. (See Income in the United States, 1929-37, p. 11.)

² Comparable figures not available because of a change in the Revenue Act of 1934.

In manufacturing, mining, and contract construction combined, total income paid out in 1937 was 86.8 percent of the 1929 total; wages in 1937 were 83.8 percent of the 1929 total; and salaries were 83.0 percent. Because of a change in the Revenue Act of 1934, dividend and interest payments before that date are not exactly comparable to payments thereafter. Between 1929 and 1934, dividend and interest payments declined somewhat more than wages. Dividends and interest together in 1934 were 50.6 percent of the 1929 figure, while wages in 1934 were 53.0 percent of the 1929 figure. However, there was a much more rapid rise after 1934 in dividends and interest than in salaries, wages, or total income paid out in these three industrial divisions, namely, manufacturing, mining, and contract construction. Dividends and interest in 1937 were 227.6 percent of the 1934 figure; wages were 158.2 percent; and total income paid out was 161.8 percent.

TABLE 3.—*Indexes of Total Income Paid Out, Wages, Salaries, and Dividends and Interest*¹ in Manufacturing, Mining, and Contract Construction, 1934-37

[1934 = 100]

Item	Manufacturing, mining, and contract construction				Manufacturing			
	1934	1935	1936	1937	1934	1935	1936	1937
Total income paid out.....	100.0	112.7	136.4	161.8	100.0	113.4	136.2	161.6
Wages.....	100.0	113.7	132.7	158.2	100.0	114.8	132.1	157.5
Salaries.....	100.0	105.6	117.1	138.5	100.0	105.7	115.8	137.6
Dividends and interest.....	100.0	123.6	192.9	227.6	100.0	128.0	203.7	238.9
	Mining				Contract construction			
	1934	1935	1936	1937	1934	1935	1936	1937
Total income paid out.....	100.0	107.5	126.8	145.1	100.0	110.8	151.2	185.3
Wages.....	100.0	106.1	121.7	138.1	100.0	111.1	156.5	196.4
Salaries.....	100.0	99.1	109.1	120.0	100.0	107.3	142.7	164.6
Dividends and interest.....	100.0	97.4	132.9	160.7	100.0	131.8	168.2	240.9

¹ Interest on long-term obligations only. Interest received by corporations is deducted from interest paid by corporations to arrive at net interest originating in corporations. (See Income in the United States, 1929-37, p. 11.) A change in the Revenue Act of 1934 prevents continuous comparison of interest and dividends with other items. For comparative trends from 1929 to 1934, see table 2.

National income produced as distinguished from national income paid out is defined as the net value of goods and services produced expressed in terms of current prices. Since prices change from year to year, the volume of goods and services produced ("real" national income) does not change at the same rate as does their net value. No satisfactory general index of prices is available that would make possible the adjustment of the net value of goods and services for measuring changes in their quantity, that is, in real income. However, it is known that prices fell considerably between 1929 and 1933 and therefore the net value of national income produced fell more rapidly than did real income. It is known also that prices rose between 1933 and 1937, and therefore real income increased less rapidly than did the national income in current dollars. But prices in 1937 were still materially lower than in 1929. The wholesale-price index was 9 percent lower and the cost-of-living index was 15 percent lower. The national income produced was only 14 percent below that of 1929. These figures indicate that real income in 1937 closely approximated that of 1929. There was, however, an increase of about 6 percent in the population.

Cost and Standards of Living

CHANGES IN COST OF LIVING IN THE UNITED STATES, DECEMBER 15, 1938

THE cost of living for families of wage earners and lower-salaried workers in the 32 large cities of the United States surveyed by the Bureau of Labor Statistics was at the same level on December 15, 1938, as on September 15, 1938.

Slight declines in the cost of food, clothing, housefurnishing goods, and miscellaneous items were counterbalanced by an increase in fuel and light costs, while rents remained unchanged.

The Bureau of Labor Statistics index of the cost of all goods purchased by wage earners and lower-salaried workers in 32 cities, based on costs in 1923-25 as 100, was 82.7 on December 15, the same as on September 15. Living costs in these cities averaged 2.1 percent lower than a year ago and 17.0 percent below the peak point in December 1929. They were 11.1 percent higher than at the low point of June 1933.

Living costs declined in 21 of the 32 cities and increased in 11, during the quarter ending December 15. In each of these cities the change was less than 1 percent, except in Buffalo where food costs caused the index for all items to increase by 1.2 percent.

Food costs in the 51 cities in which food prices are secured, were only 0.1 percent lower on December 15 than on September 15. At the end of the quarter, the index of food costs was higher in 12 cities and lower in 20 of the 32 cities for which the Bureau prepares indexes of total living costs. Of the 12 cities in which higher prices were reported, 2 showed advances of more than 3 percent (Buffalo, 3.8 percent, and Los Angeles, 3.4 percent) both largely the result of the higher cost of fresh fruits and vegetables. The declines reported were all relatively small. In only 1 city, Boston, did the net decline exceed 2 percent (2.2 percent), due in large part to an unusual drop in the price of eggs between November and December, as well as to the lowered cost of meats.

Rents paid by wage earners and lower-salaried workers were below the September 15 level in 16 cities, higher in 15, and unchanged in 1 of the 32 cities included in the survey. In no case was the change as much as 1 percent.

Fuel and light costs showed an average increase of 1.4 percent, usual at this season of the year. In 24 cities, increases were reported, of which the largest was in Houston, 4.3 percent, due entirely to increased wood prices. Four other cities reported advances of over 2 percent, all as the result of increases in coal prices—New York (3.5 percent), Birmingham (2.5 percent), Boston (2.4 percent) and Chicago (2.2 percent). Of the 7 cities reporting declines, 2 showed decreases of over 2 percent, Memphis (3.6 percent) and Cincinnati (2.5 percent). In Memphis the drop was due primarily to a decline in the cost of electricity resulting from the introduction of a new rate schedule for domestic service. In Cincinnati the decline came as the result of lower costs for gas brought about by an increase in the B.t.u. content of the gas served in that city.

There was practically no change in average costs of clothing, house-furnishing goods, and those items which are covered in the "Miscellaneous" index. All three indexes for the 32 cities combined declined by a fraction of 1 percent. Clothing costs declined slightly in 26 of the 32 cities and fractional increases were reported for 6 cities. In only 1 city, Atlanta, was there a decline of as much as 1 percent (1.1 percent), due to lower prices for many items of clothing.

Eight cities showed increases in the cost of housefurnishing goods and 24 reported decreases. Only Baltimore reported a change greater than 1 percent (a 2.4 percent drop) which resulted chiefly from price reductions in textile furnishings.

The cost of the goods and services included in the miscellaneous group was lower in 23 of the cities and higher in 9. In each of these cities, with the exception of Jacksonville, the change during the quarter was less than 1 percent. City-wide reductions in the cost of laundry service caused the miscellaneous index for Jacksonville to decline by 1.5 percent.

Percentage changes in the cost of goods purchased by wage earners and lower-salaried workers from September 15, 1938, to December 15, 1938, are shown in table 1 for 32 large cities of the United States, by groups of items.

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TABLE 1.—Percentage Change From September 15, 1938, to December 15, 1938, in Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers

City	All items	Food	Clothing	Rent	Fuel and light	House-furnish-ing goods	Miscel-laneous
Average: 32 large cities.....	(1)	² -0.1	-0.3	(3)	+1.4	-0.2	-0.1
New England:							
Boston.....	-0.7	-2.2	-5	-0.1	+2.4	+9	-2
Portland, Maine.....	-7	-1.6	-1	+2	-9	-7	-2
Middle Atlantic:							
Buffalo.....	+1.2	+3.8	+3	(1)	+5	-3	+8
New York.....	+5	+9	-3	+3	+3.5	+4	(3)
Philadelphia.....	-6	-2.0	-4	(2)	+1.6	-9	-1
Pittsburgh.....	-3	-1.0	-4	+1	+2	+4	-1
Seranton.....	+7	+2.7	(3)	+2	+1.7	-2	-9
East North Central:							
Chicago.....	-4	-1.7	-4	+2	+2.2	-2	-1
Cincinnati.....	-7	-1.5	-4	-2	-2.5	+6	-1
Cleveland.....	(2)	+3	-1	(1)	+2	-8	(1)
Detroit.....	-2	-8	+2	-6	+8	-4	+1
Indianapolis.....	-1	-2	-2	+4	(3)	-2	(1)
West North Central:							
Kansas City.....	-1	-1	-6	-2	+1.2	-5	+1
Minneapolis.....	+4	+1.3	-7	+3	+2	-4	+1
St. Louis.....	-5	-1.4	-1	-2	+5	+3	-1
South Atlantic:							
Atlanta.....	+4	+2.1	-1.1	-1	+1.6	+8	-4
Baltimore.....	-4	-8	+3	-1	+1.0	-2.4	-5
Jacksonville.....	-9	-1.3	(3)	+1	-1.1	-2	-1.5
Norfolk.....	(1)	-1	-5	+3	+1.6	-2	(1)
Richmond.....	-3	-7	-4	(1)	-1	-7	(1)
Savannah.....	+1	+3	-6	+6	+1	+1	(3)
Washington, D. C.....	-3	-6	-2	-5	+1.4	+5	-2
East South Central:							
Birmingham.....	-5	-1.5	-9	-4	+2.5	-3	-1
Memphis.....	-6	-1.0	-1	-3	-3.6	-5	(1)
Mobile.....	-4	-7	-4	+9	+2	-6	-7
West South Central:							
Houston.....	+3	+7	-4	(3)	+4.3	-9	(3)
New Orleans.....	-1	-9	-6	+7	-1.0	-2	+7
Mountain: Denver.....	(1)	+9	-2	+1	-1	-7	-9
Pacific:							
Los Angeles.....	+8	+3.4	-4	(1)	+2	-3	-2
Portland, Oreg.....	+5	+2.0	-1	-3	+6	-2	(3)
San Francisco.....	-1	-1	+1	(1)	(1)	-2	-1
Seattle.....	+2	+1.0	-2	-2	+1	-4	-1

¹ Decrease less than 0.05 percent.² Includes 51 cities.³ Increase less than 0.05 percent.⁴ No change.

Percentage changes in the cost of goods purchased by wage earners and lower-salaried workers from a peak point in June 1920, from December 1929, from the low point June 1933, and from December 15, 1937, to December 15, 1938, in 32 cities, are presented in table 2.

TABLE 2.—Percentage Change in Cost of All Goods Purchased by Wage Earners and Lower-Salaried Workers, for Specified Periods

City	Percentage change from—			
	June 1920 to Dec. 15, 1938	Dec. 1929 to Dec. 15, 1938	June 1933 to Dec. 15, 1938	Dec. 15, 1937 to Dec. 15, 1938
Average: 32 large cities.....	-31.8	-17.0	+11.1	-2.1
New England:				
Boston.....	-32.5	-18.8	+7.4	-2.6
Portland, Maine.....	-33.1	-16.3	+6.9	-2.7
Middle Atlantic:				
Buffalo.....	-30.1	-16.8	+10.5	-2.1
New York.....	-28.3	-16.5	+8.5	-2.0
Philadelphia.....	-31.0	-18.0	+9.4	-1.5
Pittsburgh.....	-31.6	-17.8	+12.5	-1.4
Scranton.....	-33.2	-20.0	+7.2	-2.0
East North Central:				
Chicago.....	-32.2	-20.4	+12.2	-1.8
Cincinnati.....	-31.7	-17.9	+9.5	-2.9
Cleveland.....	-28.8	-12.2	+14.2	-1.4
Detroit.....	-37.1	-17.6	+21.6	-4.1
Indianapolis.....	-36.1	-17.2	+11.6	-2.0
West North Central:				
Kansas City.....	-37.4	-15.3	+8.3	-1.7
Minneapolis.....	-31.2	-14.9	+12.8	-1.9
St. Louis.....	-33.5	-18.4	+10.3	-2.2
South Atlantic:				
Atlanta.....	-38.6	-17.6	+12.6	-2.4
Baltimore.....	-28.6	-14.3	+10.9	-1.7
Jacksonville.....	-36.3	-17.6	+11.1	-3.5
Norfolk.....	-35.4	-16.0	+11.3	-2.2
Richmond.....	-33.9	-15.6	+10.0	-2.6
Savannah.....	-37.6	-18.2	+8.3	-2.3
Washington, D. C.....	-29.2	-12.3	+11.1	-2.3
East South Central:				
Birmingham.....	-39.4	-20.1	+14.3	-2.7
Memphis.....	-34.5	-16.3	+10.7	-2.4
Mobile.....	-35.4	-19.0	+9.9	-2.2
West South Central:				
Houston.....	-33.4	-16.6	+14.8	-2.0
New Orleans.....	-28.7	-15.4	+11.0	-1.0
Mountain: Denver.....	-33.9	-14.3	+11.2	-3.0
Pacific:				
Los Angeles.....	-28.9	-16.1	+13.0	-1.4
Portland, Oreg.....	-34.6	-13.0	+14.7	-2.0
San Francisco.....	-25.4	-12.0	+12.3	-1.1
Seattle.....	-30.8	-12.7	+11.3	-1.7

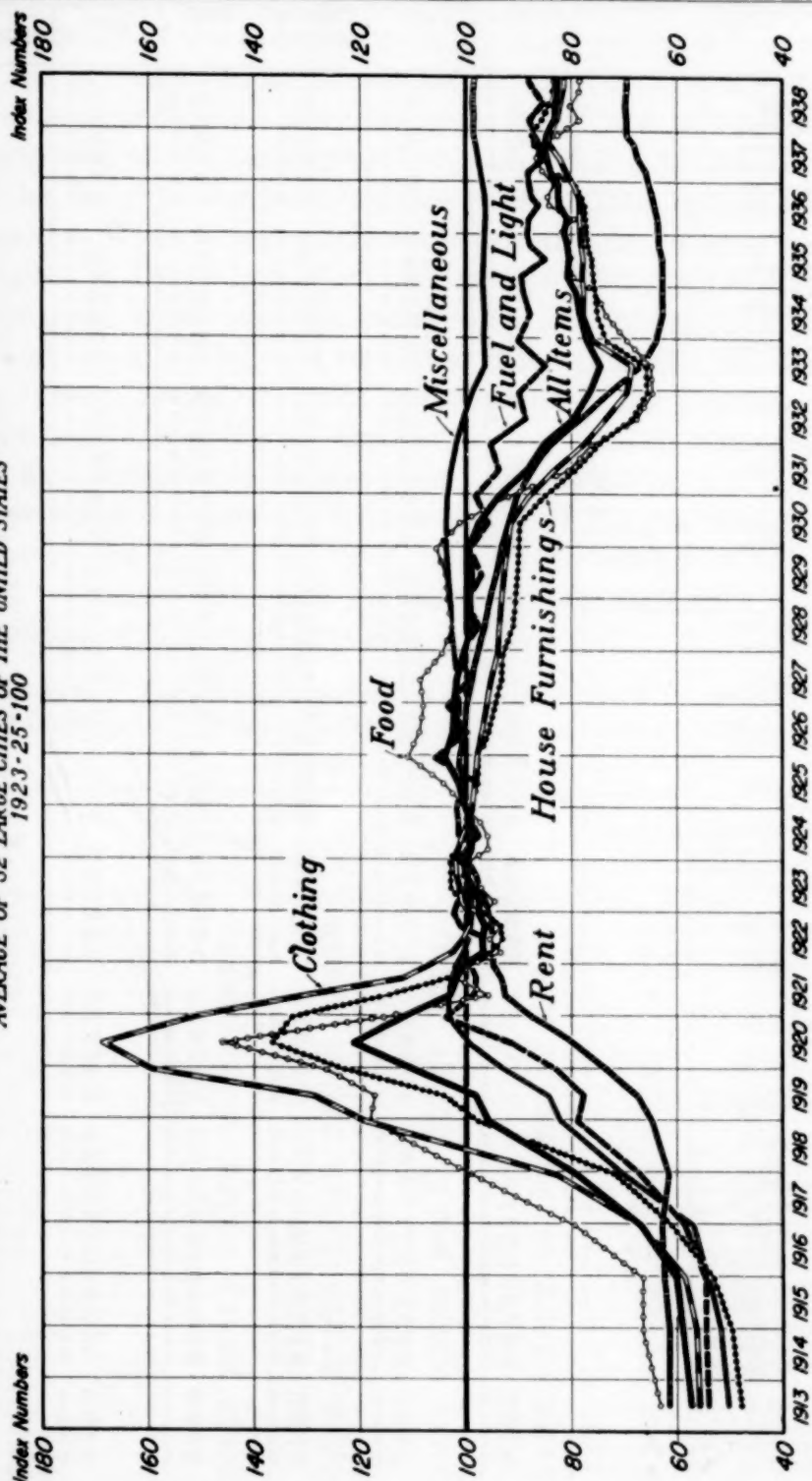
Indexes on 1923-25 Base

Indexes of the average cost of all goods purchased by families of wage earners and lower-salaried workers are constructed for each of the 32 cities surveyed and for these cities combined, using an average of the years 1923-25 as the base.¹ These indexes, from 1913 through December 15, 1938, for the 32 cities combined, are shown in table 3. The accompanying chart presents these data in graphic form.

¹ Indexes of food costs based on costs in 1923-25 as 100 are computed monthly for 51 cities (including the 32 cities in this report). Percentage changes from month to month are calculated for 7 additional cities. These data will be sent upon request.

COST OF GOODS PURCHASED BY WAGE EARNERS AND LOWER-SALARIED WORKERS

AVERAGE OF 32 LARGE CITIES OF THE UNITED STATES
1923-25=100



UNITED STATES BUREAU OF LABOR STATISTICS

TABLE 3.—Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in 32 Large Cities Combined, 1913 Through Dec. 15, 1938
[Average 1923-25=100]

Date	All items	Food ¹	Clothing	Rent	Fuel and light	House-furnish-ing goods	Miscel-laneous
1913—Average.....	57.4	63.1	55.7	61.4	53.9	47.7	50.1
1914—December.....	58.9	66.3	56.3	61.4	54.5	49.6	51.6
1915—December.....	60.1	66.3	58.3	62.3	54.5	52.8	53.9
1916—December.....	66.9	79.5	66.9	62.8	58.5	61.0	56.8
1917—December.....	79.4	99.1	83.1	61.5	66.9	71.8	70.4
1918—December.....	95.8	118.2	118.9	64.7	78.7	97.8	81.9
1919—June.....	98.2	117.3	128.8	67.3	77.8	104.0	84.3
December.....	109.8	126.4	159.5	73.1	82.6	123.0	92.9
1920—June.....	121.2	146.1	168.6	79.4	91.3	137.0	99.2
December.....	112.2	115.7	151.0	87.5	103.7	132.8	103.2
1921—May.....	102.8	95.8	129.8	92.7	98.4	114.3	103.2
September.....	101.7	102.1	112.2	93.3	98.2	103.2	102.5
December.....	100.3	99.7	107.2	94.8	99.1	100.4	102.0
1922—March.....	96.8	93.5	102.4	94.6	96.3	95.0	100.4
June.....	97.0	95.6	100.4	95.0	95.9	93.2	99.5
September.....	96.4	93.3	99.3	95.2	100.9	93.4	99.2
December.....	97.7	96.7	99.4	95.8	102.2	96.3	98.9
1923—March.....	97.6	94.6	100.8	96.3	101.5	100.7	99.0
June.....	98.7	97.7	101.1	97.3	98.7	102.8	99.1
September.....	99.9	100.0	101.9	98.2	99.8	102.9	99.6
December.....	100.2	99.5	101.8	99.7	101.1	102.9	100.0
1924—March.....	99.0	95.9	101.5	100.2	99.9	102.1	99.7
June.....	98.9	95.9	100.6	101.3	97.6	99.4	99.8
September.....	99.2	97.3	99.5	101.4	98.9	98.6	99.8
December.....	100.0	99.5	98.9	101.7	99.5	99.1	100.2
1925—June.....	101.4	104.2	98.5	101.4	97.9	97.9	100.8
December.....	104.0	111.1	97.9	101.3	105.8	97.8	101.1
1926—June.....	102.5	108.9	97.1	100.4	100.0	95.8	101.0
December.....	102.3	108.1	96.2	100.0	103.4	94.7	101.4
1927—June.....	101.9	108.7	95.3	99.0	99.4	93.4	101.7
December.....	100.4	104.7	94.0	97.9	100.6	93.0	102.1
1928—June.....	99.2	102.5	93.8	96.5	97.7	91.1	102.1
December.....	99.4	103.2	93.3	95.5	99.7	90.5	102.8
1929—June.....	99.1	103.7	92.8	94.3	97.0	90.2	103.0
December.....	99.6	105.7	92.2	93.3	99.1	89.9	103.4
1930—June.....	97.7	101.2	91.5	92.0	95.9	88.8	103.7
December.....	93.8	92.1	88.1	90.1	98.1	85.1	103.4
1931—June.....	88.3	80.6	83.4	87.3	93.7	79.3	102.8
December.....	85.1	76.2	77.6	83.9	95.3	74.9	101.8
1932—June.....	79.7	67.6	73.5	78.5	88.8	68.4	100.4
December.....	76.6	64.7	69.5	72.7	89.8	65.6	98.8
1933—June.....	74.5	64.9	68.4	66.8	84.9	65.8	96.4
December.....	77.2	69.6	76.2	63.9	90.0	73.5	96.8
1934—June.....	78.4	73.4	77.9	62.7	87.7	75.0	96.6
November 15.....	79.1	75.3	77.8	62.7	89.0	75.5	96.7
1935—March 15.....	80.6	79.8	78.0	62.6	89.3	76.0	96.8
July 15.....	80.4	80.2	77.8	62.7	84.9	76.2	96.7
October 15.....	80.7	80.2	78.0	63.3	87.7	77.0	96.6
1936—January 15.....	81.3	81.6	78.3	63.5	88.3	77.0	96.6
April 15.....	80.6	79.4	78.6	63.7	88.0	77.3	96.5
July 15.....	82.0	84.0	78.4	64.2	86.1	77.5	96.4
September 15.....	82.4	84.3	78.6	64.6	87.4	78.2	96.5
December 15.....	82.4	82.9	79.6	65.4	87.8	79.2	96.8
1937—March 15.....	83.8	85.4	80.9	65.9	88.1	83.1	97.3
June 15.....	84.5	86.3	82.1	67.5	84.9	85.1	97.7
September 15.....	85.0	85.8	84.0	68.1	86.0	86.7	98.1
December 15.....	84.5	82.6	84.0	69.3	87.3	87.5	98.6
1938—March 15.....	83.0	78.6	82.8	69.4	88.0	85.4	98.5
June 15.....	83.3	80.2	82.3	69.7	85.5	84.6	98.7
September 15.....	82.7	78.7	81.7	69.6	86.8	83.4	98.6
December 15.....	82.7	78.6	81.5	69.6	88.0	83.3	98.5

¹ Covers 51 cities since June 1920.

The indexes of the cost of goods purchased by wage earners and lower-salaried workers prepared by the Bureau of Labor Statistics show relative costs as of particular dates. For various purposes,

however, it is often necessary to have estimates of annual average indexes. These estimates are, therefore, presented in table 4, for 32 cities combined, from 1913 through 1938. The annual average indexes have been computed as follows: The annual average food index is an average of the indexes (monthly most years) falling within each year; the annual average indexes for clothing, rent, fuel and light, housefurnishing goods, and miscellaneous items are indexes of the weighted average of the aggregates for each pricing period affecting the year, the weights representing the relative importance of each pricing period. When these goods were priced only twice a year, in June and again in December, it is evident that prices in December of the previous year were more indicative of prices in the next month, January, even though it fell in a new year, than were the prices of the succeeding June. Therefore, costs in December of the preceding year and in June and December of the given year are all considered in arriving at an average cost for the year. The relative importance of each of these costs is expressed for December of the previous year by $2\frac{1}{2}$, for June of the given year by 6, and for December of the given year by $3\frac{1}{2}$. Weights for years in which pricing was done at other intervals will be furnished on request.

TABLE 4.—Estimated¹ Annual Average Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in 32 Large Cities Combined, 1913 Through 1938

[Average 1923-25=100]

Year	All items	Food ²	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous
1913.....	57.4	63.1	55.7	61.4	53.9	47.7	50.1
1914.....	58.2	64.6	56.1	61.4	54.3	49.0	51.2
1915.....	58.8	63.9	57.4	61.9	54.5	51.3	52.8
1916.....	63.2	71.7	62.9	62.6	56.6	57.2	55.5
1917.....	74.4	92.4	75.6	62.1	63.0	66.9	64.2
1918.....	87.2	106.2	102.5	63.2	73.3	85.9	76.7
1919.....	101.1	120.2	135.7	68.4	79.4	108.2	86.3
1920.....	116.2	133.1	161.6	80.4	93.1	132.8	99.1
1921.....	103.6	101.6	124.4	92.4	99.3	111.8	102.8
1922.....	97.2	95.0	101.0	95.1	98.6	94.8	99.7
1923.....	99.0	97.9	101.2	97.5	100.3	101.8	99.3
1924.....	99.2	96.9	100.4	101.0	99.1	100.1	99.9
1925.....	101.8	105.0	98.4	101.5	100.6	98.1	100.8
1926.....	102.6	108.5	97.0	100.5	102.2	95.9	101.1
1927.....	100.6	104.5	95.1	98.9	100.6	93.6	101.7
1928.....	99.5	103.3	93.7	96.5	98.9	91.3	102.3
1929.....	99.5	104.7	92.7	94.3	98.2	90.2	103.1
1930.....	97.0	99.6	90.7	91.7	97.2	87.9	103.5
1931.....	88.6	82.0	82.7	86.9	95.1	79.2	102.7
1932.....	79.8	68.3	73.2	78.0	90.4	68.9	100.2
1933.....	75.8	66.4	70.9	67.2	87.4	68.0	97.0
1934.....	78.6	74.1	77.5	62.9	88.6	74.9	96.7
1935.....	80.7	80.5	77.9	62.9	87.5	76.4	96.7
1936.....	81.6	82.1	78.7	64.2	87.5	77.8	96.5
1937.....	84.3	85.1	82.4	67.4	86.6	84.9	97.8
1938 ³	83.0	78.9	82.3	69.5	87.0	84.5	98.6

¹ For explanation of method used, see above.

² Covers 51 cities since June 1920.

³ Preliminary.

Table 5 presents indexes of the cost of goods purchased by wage earners and lower-salaried workers in each of 32 cities (arranged alphabetically), using average costs in 1923-25 as 100. These indexes are presented by groups of items for each pricing period in 1938 in each city. This table supplements tables 6 through 37 in the December 15, 1937, pamphlet, in which indexes were published for all pricing dates since the initiation of the index through December 15, 1937. Mimeographed tables of indexes for individual cities are available upon request.

TABLE 5.—*Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers, for Pricing Periods in 1938*

[Average 1923-25=100]

City and date	All items	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous
Atlanta, Ga.:							
March 15.....	80.5	71.5	86.2	65.8	75.5	91.0	95.5
June 15.....	80.3	72.5	85.7	65.8	69.4	90.1	95.4
September 15.....	80.0	71.7	84.9	65.3	72.5	88.6	95.7
December 15.....	80.3	73.1	83.9	65.3	73.6	89.3	95.4
Baltimore, Md.:							
March 15.....	86.3	82.8	82.4	76.2	81.4	86.8	104.3
June 15.....	86.7	84.2	82.3	76.2	80.9	86.1	104.3
September 15.....	86.5	83.8	81.6	76.3	82.8	84.8	104.3
December 15.....	86.2	83.1	81.9	76.2	83.7	82.7	103.8
Birmingham, Ala.:							
March 15.....	77.6	68.4	88.6	60.1	83.5	81.8	93.1
June 15.....	77.2	68.6	88.1	60.0	78.0	81.7	93.0
September 15.....	77.2	68.5	87.5	59.8	81.1	81.3	93.0
December 15.....	76.8	67.5	86.8	59.6	83.1	81.1	93.0
Boston, Mass.:							
March 15.....	82.4	74.0	87.4	75.7	85.2	84.0	98.7
June 15.....	83.0	76.1	87.0	75.6	83.7	83.4	98.6
September 15.....	82.9	76.2	86.1	75.4	85.5	81.5	98.4
December 15.....	82.3	74.5	85.7	75.4	87.6	82.0	98.2
Buffalo, N. Y.:							
March 15.....	85.0	78.0	81.4	73.7	98.1	93.2	100.3
June 15.....	84.1	77.6	80.6	73.7	96.3	92.1	98.5
September 15.....	83.6	75.8	80.4	73.7	97.3	90.9	98.5
December 15.....	84.6	78.7	80.6	73.7	97.8	90.6	99.3
Chicago, Ill.:							
March 15.....	79.4	79.9	75.6	58.4	95.4	76.5	100.6
June 15.....	80.5	82.5	75.3	60.6	91.9	75.8	100.7
September 15.....	79.7	80.1	74.7	60.6	94.0	74.1	100.2
December 15.....	79.3	78.8	74.4	60.7	96.0	73.9	100.2
Cincinnati, Ohio:							
March 15.....	86.8	79.4	82.8	77.8	98.4	96.2	101.5
June 15.....	87.2	81.9	82.0	77.6	95.5	94.3	101.3
September 15.....	86.3	79.6	81.7	77.4	96.9	92.9	101.1
December 15.....	85.7	78.4	81.4	77.2	94.4	93.4	101.0
Cleveland, Ohio:							
March 15.....	86.0	79.8	85.7	70.0	101.0	80.7	104.4
June 15.....	86.3	81.7	85.4	69.4	100.3	80.8	104.3
September 15.....	85.8	80.5	85.0	69.3	100.7	79.8	104.2
December 15.....	85.8	80.8	84.9	69.2	100.9	79.2	104.2
Denver, Colo.:							
March 15.....	84.0	84.0	79.5	64.4	79.4	92.2	109.2
June 15.....	84.4	85.7	78.9	64.3	79.3	90.7	100.2
September 15.....	82.8	81.9	78.2	64.3	77.9	89.3	100.0
December 15.....	82.8	82.6	78.0	64.4	77.8	88.7	99.1
Detroit, Mich.:							
March 15.....	81.9	80.2	84.0	69.5	80.1	85.1	95.2
June 15.....	81.5	81.4	83.3	68.4	76.8	82.8	95.1
September 15.....	80.0	77.3	82.0	67.5	78.5	82.0	95.0
December 15.....	79.8	76.7	82.1	67.1	79.1	81.6	95.1
Houston, Tex.:							
March 15.....	82.6	77.5	78.5	73.6	80.3	94.2	94.6
June 15.....	82.0	76.5	77.7	73.8	76.3	93.8	94.5
September 15.....	82.0	77.3	76.6	73.9	73.4	93.7	94.6
December 15.....	82.2	77.9	76.3	73.9	76.6	92.8	94.6
Indianapolis, Ind.:							
March 15.....	81.9	78.2	80.9	66.0	87.3	88.5	93.5
June 15.....	82.4	81.3	80.3	65.7	83.3	88.4	93.6
September 15.....	81.5	78.1	79.8	65.7	84.7	87.9	93.7
December 15.....	81.4	77.9	79.7	66.0	84.7	87.8	93.6

TABLE 5.—Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers, for Pricing Periods in 1938—Continued

City and date	All items	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous
Jacksonville, Fla.:							
March 15.....	80.0	76.0	82.3	60.0	88.9	83.8	90.7
June 15.....	79.8	76.8	81.1	59.6	87.9	82.0	90.7
September 15.....	79.9	77.5	80.7	59.6	87.4	81.7	90.7
December 15.....	79.2	76.5	80.7	59.6	86.4	81.5	89.3
Kansas City, Mo.:							
March 15.....	82.0	78.6	82.2	61.8	84.2	81.7	100.2
June 15.....	82.6	82.0	81.7	61.7	79.4	80.3	100.2
September 15.....	81.8	79.9	81.5	61.6	79.5	78.2	100.1
December 15.....	81.7	79.8	81.1	61.5	80.5	77.9	100.2
Los Angeles, Calif.:							
March 15.....	78.1	71.5	86.9	55.3	82.0	83.1	93.9
June 15.....	78.6	72.2	86.4	55.4	81.6	82.8	95.0
September 15.....	78.3	71.2	86.4	55.3	81.5	82.4	95.0
December 15.....	78.9	73.7	86.1	55.2	81.7	82.2	94.9
Memphis, Tenn.:							
March 15.....	81.7	74.9	88.7	63.2	88.5	94.3	95.0
June 15.....	81.7	75.3	88.5	63.1	88.1	94.2	95.0
September 15.....	81.5	75.1	87.4	63.0	88.8	93.3	94.9
December 15.....	81.0	74.3	87.3	62.9	85.6	92.8	94.9
Minneapolis, Minn.:							
March 15.....	84.8	84.1	81.0	71.2	90.8	89.4	97.7
June 15.....	85.6	87.4	80.3	71.6	89.3	88.3	97.6
September 15.....	83.9	82.3	79.7	71.9	90.8	87.7	96.5
December 15.....	84.2	83.4	79.2	72.1	90.9	87.4	96.6
Mobile, Ala.:							
March 15.....	83.5	75.1	90.3	66.8	72.4	90.4	99.6
June 15.....	83.4	75.3	90.0	66.9	70.4	90.1	99.5
September 15.....	82.6	74.5	89.5	66.9	71.3	89.2	98.1
December 15.....	82.3	74.0	89.1	67.5	71.4	88.7	97.4
New Orleans, La.:							
March 15.....	83.9	82.5	82.9	72.5	77.6	96.7	92.5
June 15.....	83.2	81.7	82.2	72.5	75.3	95.3	92.1
September 15.....	83.7	83.5	81.5	72.7	75.0	93.5	92.0
December 15.....	83.6	82.8	81.0	73.3	74.2	93.3	92.7
New York, N. Y.:							
March 15.....	84.0	79.9	80.6	77.2	86.4	79.3	99.1
June 15.....	84.3	80.8	80.1	77.3	84.4	79.4	99.7
September 15.....	84.3	81.2	79.4	77.4	84.5	78.2	99.6
December 15.....	84.8	81.9	79.1	77.7	87.4	78.6	99.6
Norfolk, Va.:							
March 15.....	85.1	76.1	89.7	64.6	81.7	88.0	104.0
June 15.....	84.4	74.7	89.2	64.7	80.0	87.3	104.0
September 15.....	84.5	75.6	88.3	64.7	80.6	86.9	104.0
December 15.....	84.5	75.5	87.9	64.9	81.9	86.7	104.0
Philadelphia, Pa.:							
March 15.....	82.4	80.0	80.2	68.9	82.3	85.5	96.3
June 15.....	83.1	82.2	79.5	69.1	78.6	83.0	97.8
September 15.....	82.5	80.0	78.9	69.1	82.2	81.6	97.7
December 15.....	81.9	78.4	78.6	69.2	83.6	80.9	97.6
Pittsburgh, Pa.:							
March 15.....	82.4	78.2	81.5	69.2	101.4	85.0	96.4
June 15.....	82.9	79.6	81.4	70.2	99.7	84.5	96.2
September 15.....	82.6	78.8	81.2	70.4	100.7	83.9	96.1
December 15.....	82.3	78.0	80.9	70.4	100.9	84.3	96.1
Portland, Maine:							
March 15.....	85.0	77.6	83.0	76.7	83.7	91.7	103.6
June 15.....	85.1	79.3	82.3	76.5	79.6	91.3	103.5
September 15.....	84.6	78.1	82.4	76.4	80.0	90.7	103.3
December 15.....	84.1	76.8	82.3	76.6	79.3	90.0	103.1
Portland, Oreg.:							
March 15.....	84.3	80.3	82.3	62.4	86.9	86.0	102.0
June 15.....	83.7	80.9	81.9	62.2	84.8	85.0	100.1
September 15.....	82.9	78.2	81.8	62.3	85.7	85.1	100.1
December 15.....	83.3	79.8	81.7	62.1	86.2	84.9	100.1
Richmond, Va.:							
March 15.....	84.0	72.2	91.4	73.0	82.6	93.6	99.5
June 15.....	83.1	70.7	90.5	73.1	80.4	93.0	99.3
September 15.....	83.5	71.9	90.1	73.3	83.0	91.2	99.2
December 15.....	83.3	71.4	89.7	73.3	82.9	90.5	99.1
St. Louis, Mo.:							
March 15.....	83.5	83.6	83.0	58.6	87.6	90.6	101.9
June 15.....	83.8	85.9	82.2	58.5	84.5	90.6	101.5
September 15.....	83.2	83.9	82.0	58.4	87.2	89.8	101.4
December 15.....	82.9	82.7	81.9	58.3	87.6	90.1	101.3
San Francisco, Calif.:							
March 15.....	87.8	81.1	93.6	73.3	80.2	91.0	104.7
June 15.....	88.2	81.3	93.0	73.6	78.7	90.7	106.4
September 15.....	88.3	82.0	92.4	73.8	78.7	89.5	106.4
December 15.....	88.3	81.9	92.5	73.7	78.7	89.4	106.3

TABLE 5.—*Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers, for Pricing Periods in 1938—Continued*

City and date	All items	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous
Savannah, Ga.:							
March 15.....	81.4	77.6	86.1	63.6	85.0	88.0	92.1
June 15.....	81.2	78.4	85.1	63.8	84.3	86.4	91.5
September 15.....	80.8	77.6	84.4	63.8	83.9	86.3	91.4
December 15.....	80.9	77.8	83.9	64.1	84.0	86.4	91.4
Scranton, Pa.:							
March 15.....	82.0	75.5	83.5	72.6	76.8	90.3	97.2
June 15.....	82.1	77.1	83.0	72.5	73.1	86.8	97.1
September 15.....	80.7	73.0	83.0	71.9	75.0	86.1	97.4
December 15.....	81.3	75.0	83.0	72.1	76.3	86.0	96.5
Seattle, Wash.:							
March 15.....	87.6	79.1	90.5	71.3	98.3	92.9	101.1
June 15.....	87.5	79.6	89.4	71.3	97.3	92.8	101.2
September 15.....	86.8	77.7	89.0	71.1	97.6	91.2	101.2
December 15.....	87.0	78.5	88.9	71.0	97.7	90.9	101.1
Washington, D. C.:							
March 15.....	87.1	79.6	83.9	88.0	84.3	91.1	100.3
June 15.....	87.2	80.6	83.8	87.7	82.1	90.3	99.9
September 15.....	87.0	80.7	82.9	87.4	83.6	88.9	99.9
December 15.....	86.8	80.2	82.7	87.0	84.8	89.3	99.8

Description of the Indexes

The Bureau of Labor Statistics indexes presented in this pamphlet show changes from time to time in the cost of goods and services purchased by wage earners and lower-salaried workers in each of 32 large cities of the United States and in these cities combined. The importance of each city in the average for the cities combined is determined by the population of the metropolitan area in which the city is located.

These indexes are now constructed by pricing a fixed bill of goods at quarterly intervals—March 15, June 15, September 15, and December 15. In order that the index for any city will reflect price changes and not changes in qualities or kinds of commodities, identical goods and services are priced at consecutive periods (or equivalent goods when changes in consumption habits make pricing identical goods impossible).

The bill of goods or budget priced has been chosen to represent those goods and services most important in the spending of families of wage earners and lower-salaried workers in each of the 32 cities covered, as shown by a study of the expenditures of 12,096 families in 1917-19.¹ Differences in climate as reflected in fuel requirements and the weight of clothing used, as well as differences in food consumption habits, make it impossible to use an identical budget from city to city. Although the list of items priced varies little from city to city, there are differences in the grades of goods priced and the weights assigned to each item.

¹ The results of this study were published in Bureau of Labor Statistics Bull. No. 357, now out of print, but obtainable in most public libraries.

The budgets now used include 84 foods, although before 1935 only 42 items were included. The prices used in the construction of the food indexes are taken from retail price quotations secured in 51 cities. For all other groups of goods indexes are computed for 32 cities. There are 68 items included in the clothing indexes, 17 in the housefurnishing-goods indexes, and 5 in the fuel and light indexes. For these indexes, several grades of each commodity are priced in order to secure representative averages.

For the rent indexes the number of quotations secured varies with size of city. The range is from approximately 700 in Mobile to approximately 2,500 in New York City.

The miscellaneous group, containing 44 items, includes streetcar fares, motion pictures, newspapers, laundry services, cleaning supplies, barber service, tobaccos, toiletries, medical care, and medicines.²

The Bureau has recently completed a Nation-wide study of family expenditures in large cities which will provide a new budget more nearly approximating present-day consumption. The computation of new weights and the preparation of a revised index are now in process.³

Prices are obtained from retail outlets selected as representative of the stores patronized by wage earners and lower-salaried workers. Prices for items in the food and fuel and light indexes are secured by mail, all others by personal visits of representatives of the Bureau who have been trained to recognize differences in quality, construction, and design which affect the sale value of a given article. Specifications, developed after a study of the commodities covered and consultations with experts in each merchandising field, are used by the agents in securing prices comparable from one period to the next. When a new item replaces one which has disappeared from the market, or which is no longer frequently purchased, the price in the previous pricing period is obtained for the new item in order that the index may still be computed from prices of identical commodities from period to period.

The percentage change in the cost of each group of items between given pricing periods is computed on the basis of the aggregate cost of a bill of goods representing the expenditures of the wage earner and clerical group. Each time the comparison is made, identical quantity weights are multiplied by comparable prices for both periods. If the aggregative cost of miscellaneous items in a certain city was computed to be \$309 on December 15 and the aggregative cost in September was \$300, the cost of miscellaneous items in that city would be stated to have increased 3 percent from September 15 to

¹ A mimeographed list of the items included in the indexes will be sent on request.

² Articles presenting the results of this study have already been prepared and published in the Monthly Labor Review. Reprints are available upon request.

December 15. Given the September miscellaneous-items index for that city as 93.6, based on costs in 1923-25 as 100, the December index would become 96.4 (93.6×103.0 percent).⁴

The groups of items in the index are combined into an all-items index by summing aggregate costs for the six groups at a given date and dividing by the similar sum in the base period.

It is apparent, from the above, that any one wishing to compute indexes on a base other than the 1923-25 base used in this pamphlet may do so merely by dividing the indexes for each date by the index given for the date chosen as the new base. If the percentage change over a given period of time is desired, divide the later index by the earlier, subtract 100 if there has been an increase, or subtract from 100 if there has been a decrease.

The only comparison between cities that can be drawn from the Bureau's indexes is a comparison of the extent of change in living costs in different cities over given periods. Thus, the index of the cost of all items as of December 15, 1938, based on costs in 1923-25 as 100, was 76.8 in Birmingham and 88.3 in San Francisco. A comparison of these two indexes indicates that on December 15, 1938, living costs in Birmingham were 23.2 percent lower than the average for the years 1923-25, but that in San Francisco costs on this date were only 11.7 percent lower. This comparison does not indicate that costs on December 15, 1938, were 15 percent higher in San Francisco than in Birmingham. In order to secure figures showing a comparison of actual living costs between cities, expenditures serving as the weights for items priced in the different cities would have to be representative of identical levels of living. Differences between the average costs from which the indexes are computed in different cities are due to differences in standards and in purchasing habits in those cities as well as to varying prices for goods of given grades. Differences between the indexes of costs from time to time in the various cities at any particular date are due entirely to differences in the percentage of change of living costs in each city.

The comparison of the cost of the same level of living from one part of the country to another presents serious technical difficulties for which wholly satisfactory techniques have not yet been developed. This is particularly true in attempting to measure differences in living costs from large to very small cities or from urban to rural communities, where consideration must be given not only to differences in such factors as climate and consumption habits, but also to differences in housing, the fuels available, and the means of transportation. In large cities with similar climate, comparisons are possible with the use of

⁴ For method of index construction, see article "Revision of Index of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers," published in the September 1935 Monthly Labor Review, reprints of which are available upon request.

an identical budget and descriptive specifications to facilitate pricing identical commodities and services from city to city. Such studies, because of their great expense, are beyond the present resources of this Bureau.

The Division of Social Research of the Works Progress Administration made a study of the comparative cost of living at a "maintenance level" and at an "emergency level" in 59 cities, as of March 15, 1935. The results of this study were published in the report of the Works Progress Administration "Intercity Differences in Costs of Living in March 1935, 59 Cities," Research Monograph XII, a copy of which may be secured by writing to that Division. No attempt has been made to repeat this study for a later date. Approximations for later dates may be made for 31 cities by applying to the data secured by the Works Progress Administration as of March 15, 1935, the Bureau of Labor Statistics' indexes which show changes in living costs from time to time. A mimeographed statement of the method of combining the two sets of figures, with the results obtained for the 31 cities as of December 15, 1938, will be sent upon request either to the Bureau of Labor Statistics or the Works Progress Administration.



COST OF LIVING IN FOREIGN COUNTRIES¹

THE principal index numbers of the cost of living (official and unofficial) published in the different countries are given in the following table. A brief discussion of these indexes is presented in earlier issues of this pamphlet.

¹ Table from *International Labor Review*. Geneva, January 1939, pp. 114-117.

TABLE 6.—Indexes of Cost of Living for Specified Periods for the United States and Certain Foreign Countries¹[Series recalculated by International Labor Office on base 1929=100; ^a a=food; ^b b=heating and lighting; ^c c=clothing; ^d d=rent; ^e e=miscellaneous]

Country.....	Argentina	Australia	Austria	Belgium	Brazil	Bulgaria	Burma	Canada	Chile	China		
Towns and localities.....	Buenos Aires	30	Vienna	59	Rio de Janeiro	12-67	Rangoon	60	Santiago	Peiping	Shanghai	Tientsin
Original base (=100).....	Oct. 1933	1923-27	July 1914	1921	1928-29	1914	1931	1926	Mar. 1928	1927	1926	1926
Composition of index.....	a-e	a-e	a-e	a-e	a-e	a-e	a-e	a-e	a-e	a-e	a-e	a-d
1930.....	101	95	100	104	91	92	(3)	99	99	103	113	103
1931.....	87	85	96	93	88	80	100	90	98	90	117	98
1932.....	78	81	97	84	88	73	98	81	104	86	110	91
1933.....	83	78	95	83	87	68	90	78	130	76	99	80
1934.....	78	80	95	79	94	64	87	79	130	75	98	78
1935.....	83	81	95	80	99	60	89	79	132	81	99	86
1936.....	91	83	95	85	114	57	88	81	144	94	105	98
1937.....	93	85	95	92	-----	58	89	83	162	-----	122	-----
1937—Mar.....	92	* 84	94	90	119	58	89	82	152	105	108	108
June.....	95	* 85	95	90	* 122	58	89	83	164	98	110	104
Sept.....	92	* 85	94	95	-----	59	88	84	171	-----	137	-----
Dec.....	93	* 86	94	95	-----	60	92	84	165	-----	155	-----
1938—Mar.....	92	* 86	94	94	-----	60	88	84	165	-----	139	-----
June.....	94	* 87	94	94	-----	60	87	84	171	-----	132	-----
Sept.....	* 91	* 88	93	94	-----	60	87	84	171	-----	143	-----
Dec.....	-----	-----	* 93	* 94	-----	* 60	* 86	* 84	* 173	-----	* 142	-----

Country.....	Colombia	Costa Rica	Czechoslovakia	Danzig	Denmark	Egypt	Estonia	Finland	France	Germany	Great Britain and N. Ireland	
Towns and localities.....	Bogota	San Jose	Prague	Danzig	100	Cairo	Tallinn	36	Paris	45-50	72	509
Original base (=100).....	Feb. 1937	1936	July 1914	July 1913	1931	Jan. 1913-July 1914	1913	1935	1914	1930	1913-1914	July 1914
Composition of index.....	a-e	a-e	a-e	a-e	a-e	a, c-e	a-e	a-e	a-e	a-e	a-e	a-e
1930.....	(3)	(3)	98	95	96	98	89	(3)	105	100	96	96
1931.....	(3)	(3)	93	88	90	91	86	(3)	102	97	88	90
1932.....	(3)	(3)	92	80	90	87	80	(3)	95	91	78	88
1933.....	(3)	(3)	91	77	92	83	75	(3)	94	87	77	85
1934.....	(3)	(3)	90	76	96	84	74	(3)	93	83	79	86
1935.....	(3)	(3)	92	85	99	86	75	100	87	78	80	87
1936.....	(3)	100	93	93	101	86	84	100	91	86	81	90
1937.....	100	106	94	97	104	85	89	105	111	102	81	94
1937—Mar.....	-----	107	94	97	103	85	88	¹⁰ 106	* 104	* 97	81	92
June.....	-----	107	95	98	104	84	89	¹⁰ 106	* 109	* 99	81	95
Sept.....	98	109	95	98	105	85	89	¹⁰ 109	* 113	* 104	81	96
Dec.....	104	108	95	98	106	85	92	¹⁰ 108	* 118	* 110	81	97
1938—Mar.....	110	108	97	97	106	86	95	¹⁰ 107	* 124	* 113	81	94
June.....	122	107	98	97	105	87	94	¹⁰ 106	* 124	* 115	82	97
Sept.....	105	107	* 98	98	106	86	93	¹⁰ 109	* 124	* 117	81	95
Dec.....	-----	* 107	-----	* 97	-----	* 87	* 92	-----	-----	-----	* 81	* 95

See footnotes at end of table.

TABLE 6.—Indexes of Cost of Living for Specified Periods for the United States and Certain Foreign Countries ¹—Continued(Series recalculated by International Labor Office on base 1929=100; ¹ a=food; b=heating and lighting; c=clothing; d=rent; e=miscellaneous)

Country.....	Greece	Hun- gary	India		Indo- China	Iran	Ire- land	Italy	Japan			Lat- via
Towns and localities.....	44	Buda- pest	Bom- bay	Ah- med- abad	Saigon	7	105	50	24	13	Tokyo	Riga
Original base (=100).....	Dec. 1914	1913	July 1933- June 1934	Aug. 1926- July 1927	1925	Mar. 21, 1936- Mar. 20, 1937	July 1914	June 1928	July 1937	July 1914	July 1914	1930
Composition of index.....	a-e	a-d	a-e	a-e	a, d, e	a-e	a-e	a-e	a-e	a-e	a-c, e	a-e
1930.....	88	91	-----	90	107	(³)	97	97	(³)	(³)	86	100
1931.....	¹¹ 100	86	-----	77	93	(³)	91	87	(³)	¹² 98	75	91
1932.....	106	83	-----	78	81	(³)	89	83	(³)	100	75	79
1933.....	114	77	100	74	75	(³)	86	80	(³)	103	80	76
1934.....	116	76	¹³ 99	73	69	(³)	87	76	(³)	106	82	72
1935.....	117	78	100	73	69	(³)	89	77	(³)	110	84	73
1936.....	121	82	101	73	70	100	91	83	(³)	113	88	73
1937.....	131	87	106	78	83	116	97	91	100	118	96	79
1937—Mar.....	130	87	104	75	⁴ 83	110	⁴ 95	87	99	116	94	72
June.....	132	87	105	78	⁴ 83	113	⁴ 95	92	99	117	94	84
Sept.....	131	88	108	79	⁴ 84	118	⁴ 97	95	102	119	98	82
Dec.....	132	88	107	77	⁴ 88	123	⁴ 101	98	103	120	101	81
1938—Mar.....	131	88	107	73	⁴ 90	135	⁴ 98	98	107	124	106	81
June.....	128	87	105	73	⁴ 93	130	⁴ 97	98	109	126	109	93
Sept.....	130	88	105	⁷ 73	⁴ 96	⁷ 130	⁴ 98	97	113	129	113	87
Dec.....	-----	⁸ 87	⁸ 106	-----	-----	-----	⁴ 100	⁸ 98	-----	⁸ 129	⁸ 116	⁸ 96

Country.....	Lith- uania	Lux- emburg	Neth- erlands	Netherlands Indies		New Zea- land	Nor- way	Pales- tine	Peru	Pol- and	Port- ugal
Towns and localities.....	104	9	Amster- dam	Java and Madura	Bata- via	4-25	31	3	Lima	War- saw	Whole coun- try
Original base (=100).....	1913	1914	Oct. 1923- Sept. 1924	1913	Jan. 1929	1926- 1930	July 1914	Jan. 1922	1913	1928	June 1914
Composition of index.....	a-e	a-c, e	a-e ⁴	a, b, e	a-e	a-e	a-e	a, b, e	a, c-e	a-e	a, b, e
1930.....	89	102	96	97	-----	98	97	89	96	92	95
1931.....	83	91	90	65	-----	90	92	80	90	82	84
1932.....	71	79	84	48	-----	84	90	82	86	74	83
1933.....	61	79	83	39	-----	79	89	79	83	67	83
1934.....	57	76	83	39	-----	81	89	80	85	62	83
1935.....	50	74	81	41	¹³ 52	83	91	79	86	60	84
1936.....	51	75	79	38	49	86	93	84	90	58	86
1937.....	56	79	82	44	52	92	100	88	96	62	89
1937—Mar.....	56	77	80	41	-----	90	97	88	95	62	89
June.....	56	80	82	43	51	91	100	85	97	62	88
Sept.....	56	81	83	46	53	93	102	87	97	62	88
Dec.....	56	81	83	47	53	95	103	85	98	62	90
1938—Mar.....	57	81	82	46	53	94	103	86	98	60	86
June.....	57	82	84	44	52	95	104	83	99	60	86
Sept.....	57	81	83	43	53	95	102	85	96	60	85
Dec.....	⁸ 57	⁸ 82	⁸ 83	-----	⁸ 53	⁸ 95	⁸ 102	⁸ 91	⁸ 96	⁸ 60	⁸ 85

See footnotes at end of table.

TABLE 6.—Indexes of Cost of Living for Specified Periods for the United States and Certain Foreign Countries¹—Continued[Series recalculated by International Labor Office on base 1929=100; ² a=food; b=heating and lighting; c=clothing; d=rent; e=miscellaneous]

Country.....	Pun- jab	Ru- ma- nia	South- ern Rho- desia	Spain	Swe- den	Swit- zer- land	Tur- key	Union of South Africa	United States B. L. S.	Yugoslavia	
Towns and localities.....	Lahore	Bucha- rest	6	Madrid	49	49	Istan- bul	9	32-51	Bel- grade	3 (Croa- tia and Sla- vonja)
Original base (=100).....	1931- 1935	1929	1914	1914	July 1914	June 1914	Jan.- June 1914	1914	1923-25	1926	July 1914
Composition of index.....	a-e	a, b	a, b, d	a, b, e	a-e	a-e	a-e	a-e	a-e	a-c, e	a-e
1930.....	(³)	88	100	103	97	98	92	98	98	92	92
1931.....	(³)	73	96	107	94	93	87	94	89	87	85
1932.....	(³)	62	92	103	92	86	85	90	80	81	77
1933.....	(³)	56	87	100	91	81	76	88	76	79	66
1934.....	(³)	53	87	102	91	80	75	89	79	75	61
1935.....	100	57	86	99	92	80	69	88	81	74	60
1936.....	115	61	86	-----	93	81	70	88	82	74	61
1937.....	¹² 128	67	87	-----	95	85	71	91	85	78	65
1937—Mar.....	-----	62	87	-----	95	85	71	90	84	74	64
June.....	-----	65	87	-----	95	85	69	91	85	78	66
Sept.....	-----	70	87	-----	97	85	70	91	85	79	65
Dec.....	-----	74	88	-----	97	86	71	94	85	83	69
1938—Mar.....	108	74	88	-----	97	85	72	94	83	84	69
June.....	104	77	89	-----	98	85	70	94	84	88	71
Sept.....	⁷ 105	74	⁸ 87	-----	98	85	⁹ 70	93	83	-----	69
Dec.....	-----	⁹ 74	-----	-----	-----	⁹ 85	-----	-----	83	-----	⁹ 70

¹ Table from International Labor Review, January 1939 (pp. 114-117).² Except for series in italics, which are on original base, or recalculated on nearest possible year to 1929.³ No indexes computed.⁴ Indexes computed as of February, May, August, and November.⁵ May.⁶ July.⁷ August.⁸ October.⁹ November.¹⁰ Indexes computed as of January, April, July, and October.¹¹ New or revised series beginning this year.¹² Average calculated for a period less than 1 year.

WHERE THE PURCHASER'S FOOD DOLLAR GOES

By HECTOR LAZO and M. H. BLETZ¹

OF every dollar spent by the housewife for food for her family in September 1937, the retailer received 21.7 cents, according to a recent study.¹ The dollar's worth of food in its raw state, or as it left the farm, had a value of 36.6 cents. To this the transportation agencies (railroads, trucking companies, etc.) added 7.3 cents for their services, brokers and commission merchants added 1.6 cents, manufacturers and processors 27.0 cents, and wholesale grocers 5.8 cents.

These sums, of course, did not represent net profit, for out of them had to be met the costs of each class of agent or dealer. Tabulation of expenditures for each item of cost showed that 7.2 percent of each dollar spent for food represented net profit of all agencies combined.

For their services the farmers received 10.7 percent, and 8.0 percent went for seeds, animals, etc., used in production by the farmers. Owners of middleman businesses received 10.3 percent for their personal services, and employees' wages amounted to 22.9 percent. Advertising took 1.4 percent, and direct taxes 5.7 percent.

Method of Study

Using as a basis an average family of four persons, an average family income of \$2,100, and an average expenditure of 32-38 percent for food, the authors arrived at a weekly expenditure for food items of \$12.92 per week. A Home Economics expert in the Department of Agriculture prepared a series of menus for a family of four which for that amount would provide the requisite balanced diet to feed this family "properly." Priced at the levels of the second week of September 1937, the cost of the menus came to \$12.50. That week was used because, in the authors' opinion, it represented more nearly than any other the average for the year as a whole.

The food budget was divided into six broad groups of items: Dairy products and eggs; flour, bread, and cereal products; meat products and fish; canned goods; fresh fruits and vegetables; and beverages, seasoning, and dessert. Official reports, congressional and other official hearings, and findings of other specialized studies were used to obtain for each of these food groups the proportion of the consumer's dollar going to the producer and to each class of middlemen. The cost of doing business of each of these classes of middlemen was then ascertained for each food group. A summary of the results is shown in table 1.

¹ Mr. Lazo is executive vice president of the Cooperative Food Distributors of America (the central federation of a number of retailer-owned cooperative wholesales), and Mr. Bletz is a statistician with special knowledge of marketing of food. They are joint authors of a study entitled "Who Gets Your Food Dollar?" (published by Harper & Bros., New York), on which the present article is based

Distribution of Weekly Food Expenditures

The amount and percent of the weekly food purchases (\$12.50 for the second week in September 1937) which were accounted by the gross sums going to farmer and specified middlemen are shown in the following table.

Amount and Percent of Weekly Food Expenditure Going to Specified Agencies

Agency	Total weekly food budget	Dairy products and eggs	Flour, bread, and cereal products	Meat products and fish	Canned goods	Fresh fruits and vegetables	Beverages, seasoning, and dessert
Amount of weekly food expenditure going to—							
Farmers and other primary producers ¹	\$4.565	\$1.05	\$0.32	\$1.97	\$0.365	\$0.44	\$0.42
Transportation agencies.....	.81	.11	.11	.21	.055	.31	.10
Brokers and agents.....	.285	.01	.04	.06	.04	.02	.03
Processors, assemblers, and packers.....	3.40	.62	.57	.56	.93	.21	.51
Wholesale grocers.....	.72	.13	.06	.22	.14	.06	.11
Retail grocers.....	2.72	.31	.25	1.06	.33	.47	.30
Total.....	12.50	2.23	1.35	4.08	1.86	1.51	1.47
Percent of weekly food expenditure going to—							
Farmers and other primary producers ¹	36.6	47.1	23.6	48.2	19.7	29.4	28.7
Transportation agencies.....	7.3	5.0	8.4	5.3	3.0	20.2	7.1
Brokers and agents.....	1.6	.6	2.9	1.5	2.2	1.5	1.7
Processors, assemblers, and packers.....	27.0	27.6	42.3	13.6	49.9	13.6	34.5
Wholesale grocers.....	5.8	5.8	4.4	5.4	7.5	4.3	7.7
Retail grocers.....	21.7	13.9	18.4	26.0	17.7	31.0	20.3
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Includes cost of seed and other primary products as well as of container materials and fuel.

In general the largest portions of the consumer's dollar were accounted for by the farmer, the processor or manufacturer, and the retailer. The farmer's share, however, included his expenses for seed, animals, fertilizer, fuel, and containers, which together formed from 7.9 to 8.2 percent of the total cost of the various foods.

The farmer's returns were relatively greatest for his dairy and meat products, least for canned goods. For the cereal products, where processing costs were high (42.3 cents), the farmer got only 23.6 cents of the buyer's dollar; and on canned goods, where the processor took 49.9 cents, the farmer received only 19.7 cents. The farmer's relative share (29.4 cents) was also low on fresh fruits and vegetables; on these commodities 20.2 cents went for transportation and the retailer took 31.0 cents—more in both cases than in any other food group.

Minimum Wages and Maximum Hours

OPERATION OF WAGE AND HOUR LAW, 1938

ESTIMATES for September 1938 show that 11,000,000 persons were employed in industries subject to the Fair Labor Standards Act, of whom 300,000 were receiving less than 25 cents an hour and 1,384,000 were working more than 44 hours per week when the legislation became effective. These figures are included in the first report of the Administrator of the Wage and Hour Division, United States Department of Labor,¹ to the President, for the 4½ months of 1938 during which the Division functioned. In addition to information on economic coverage of the law, the report contains sections on the scope of the legislation, progress of the Wage and Hour Division, the administrative program for 1939, and general administrative problems. Only the economic section of the report and the number of complaints and violations reported are dealt with here. An article in the Monthly Labor Review for January 1939 (p. 151) showed the major interpretations and regulations issued during the early months of operation under the act.

As it was believed necessary to have a knowledge of the coverage of the law, in order to administer it effectively, estimates of various kinds were made by the economic section of the Wage and Hour Division. They are not regarded as final by the Administrator, as they were based on data collected before the Wage and Hour Division was established, and not to meet its needs. The totals calculated are used as a partial measure of the groups being dealt with and are subject to correction and enlargement in the light of findings in special surveys.

The following estimates were made as of September 1938:

	<i>Number</i>
Employees covered by the act.....	11, 000, 000
Total receiving less than 25 cents an hour.....	300, 000
Total receiving less than 30 cents an hour.....	550, 000
Total receiving less than 40 cents an hour.....	1, 418, 000
Total working more than 44 hours a week.....	1, 384, 000
Total working more than 42 hours a week.....	1, 751, 000
Total working more than 40 hours a week.....	2, 184, 000

¹ U. S. Department of Labor. Wage and Hour Division. Interim report of the Administrator for the period August 15 to December 31, 1938. Washington, 1939.

The total of 11,000,000 persons covered includes 10,670,000 employees subject to the act in the United States and Puerto Rico. Recent data were not available for Hawaii and Alaska. This total does not include about 220,000 employees of manufacturing establishments with less than 6 wage earners per establishment. It is expected that the estimate of coverage will be raised considerably when more accurate measurements are made. The tentative figure of 11,000,000 persons is roughly one-third of the supervised employees who worked for wages and salaries.

The aggregate numbers receiving less than 25 cents an hour (300,000) and working more than 44 hours a week (1,384,000) are extremely conservative estimates, according to the report under review. These are the numbers affected by the terms of the legislation during the first year of operation, which will end on October 23, 1939. Many workers engaged in low-paid occupations are not subject to the Fair Labor Standards Act. Other figures given under the classifications of wages and hours in the above tabulation show what the effect of introduction of progressively higher standards, as provided by the law for subsequent years, would mean to workers if they were employed in the same numbers and under the same conditions that existed when these estimates were made.

It was too early to measure the effects of the law at the end of 1938. The most noticeable immediate consequences were adjustments in connection with the minimum-wage provision and a tendency toward increased employment resulting from the provision that hours worked in excess of the maximum of 44 per week must be compensated at one and one-half times the regular hourly rate. Spot surveys conducted in December failed to show that widespread lay-offs followed the introduction of higher labor standards.

Although no official action was taken in 1938 to punish violators of the provisions of the law, several hundred violations were investigated. Some employers agreed to pay back wages when informed that they had paid less than the required minimum. Complaints and violations reported numbered 5,294. They were received either directly at the Washington office of the Wage and Hour Division or through field representatives.

Preliminary analysis of complaints showed that on their face 40 percent constituted violations, 27 percent did not contain enough information on which to base a preliminary determination, 17 percent were cases of complaint against employers who were not subject to the law or in which no violation was involved, and the remaining 16 percent were borderline cases that were not yet determined.

The Administrator stated in the foreword to the report that his belief that employers, employees, and the public approve of the purposes of the law was confirmed by an extensive inspection trip.

Because of the general acceptance of the objectives of the legislation, the Administrator believes that the Wage and Hour Division has a real responsibility for securing compliance. Otherwise the law may work hardship on complying employers who compete with others who do not maintain the minimum standards laid down.



STEEL WAGE DETERMINATION UNDER PUBLIC CONTRACTS ACT

WAGES in the iron and steel industry, ranging from 45 to 62½ cents per hour according to locality, were determined, effective March 1, 1939, as the prevailing minima to be paid on work to fulfill contracts with agencies of the United States Government, subject to the provisions of the Public Contracts Act.¹ This is the twentieth determination of industry-wide coverage.²

Definitions

Industry.—For the purposes of this determination the iron and steel industry is defined as including the business of producing and selling all or any one or more of the following products:

- Axles—rolled or forged.
- Bale ties—single loop.
- Bars—alloy steel, hot rolled.
- Bars—cold finished, carbon and alloy.
- Bars—concrete reinforcing, straight lengths.
- Bars, ingots, blooms, and billets—iron.
- Bars—merchant steel.
- Bars—tool steel.
- Ferro-manganese and spiegeleisen.
- Girder rails and splice bars therefor.
- Ingots, blooms, billets, and slabs—alloy.
- Ingots, blooms, billets, and slabs—carbon.
- Light rails—60 pounds or less per yard—and splice bars and angle bars therefor.
- Standard tee rails of more than 60 pounds per yard—and angle bars and rail joints therefor, or any of such products.
- Mechanical tubing.
- Pig iron—foundry, high silicon silvery, malleable, open hearth basic, Bessemer and high silicon Bessemer.
- Pig iron—low phosphorus.
- Pipe—standard, line pipe, and oil country tubular products.
- Plates.
- Posts—fence and sign.

¹ U. S. Department of Labor. Division of Public Contracts. Press releases Nos. 597 and 623.

² For earlier determinations see Monthly Labor Review, July 1938 (p. 112), December 1938 (p. 1358), and February 1939 (p. 369).

Railroad tie plates.
Railroad track spikes.
Sheet bars.
Sheets.
Skelp.
Steel sheet piling.
Strip steel—cold rolled.
Strip steel—hot rolled.
Structural shapes.
Tubes—boiler.
Tube rounds.
Wheels—car, rolled steel.
Wire—drawn.
Wire hoops—twisted or welded.
Wire nails and staples, twisted barbless wire, barbed wire, twisted wire fence stays, and wire fencing (except chain-link fencing).
Wire rods.
Wire—spring.
Wire—telephone.

Tin plate, tin-mill black plate, and terneplate were excluded from the coverage of this determination, because the Government does not buy these products and evidence exists that the wage scale in their manufacture differs from the scale otherwise applying in the iron and steel industry. No objection was made to the definition recommended by the Public Contracts Board, which excluded the classifications of production noted, except that the Machinery and Allied Products Institute requested that the definition be so worded as to exclude application to open-hearth and electric furnaces used in that industry. As agreed upon, the definition does not apply to open-hearth and electric furnaces utilized in any production other than that specifically enumerated.

Locality.—In making the wage determination, it was recognized that the problem of selecting the geographical boundaries of each "locality" within which prevailing minimum wages were to be determined, involved difficulties. Objection was made to establishing rates of pay in the iron and steel industry that did not take into account existing wage differentials based on location and population of municipalities, geographical area, and size of establishment. One group held that "locality" as used in the Public Contracts Act is synonymous with "city, town, village, or other civil subdivision of the State," as used in the Davis-Bacon law (act of August 30, 1935, 49 Stat. 1011), and therefore the rates of pay on Government contracts should be fixed in the same way. However, Congress avoided using the same language, and this, the determination states, "indicates a Congressional intent to relax the rigid requirement of the Davis-Bacon law," giving the Secretary of Labor the power "to exercise a sound discretion in the selection of appropriate units for prevailing minimum-wage determinations."

Wages Established

Prevailing minimum wages were established for six different localities, as shown below. The determination also provides that apprentices may be employed at lower rates, if their employment conforms to the standards of the Federal Committee on Apprenticeship. No other tolerances for special classes of labor are allowed. This determination applies to every employer contracting to supply the Government with goods valued at over \$10,000. No employee may work over 8 hours per day or 40 hours per week, without payment for overtime, on goods for Government contracts, and child or convict labor is forbidden.

In the locality consisting of the States of Louisiana, Arkansas, Mississippi, North Carolina, South Carolina, Florida, Oklahoma, Texas, Alabama, Tennessee, Georgia, Virginia, and West Virginia (except the counties of Hancock, Brooke, Ohio, Harrison, Monongalia, and Marshall), the minimum rate is 45 cents per hour.

In the locality consisting of the States of Washington, Oregon, and California, the minimum rate is 60 cents per hour.

In the locality consisting of the States of Montana, Idaho, Nevada, Wyoming, New Mexico, Utah, Colorado, and Arizona, the minimum rate is 60 cents per hour.

In the locality consisting of the States of North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, and the area in and about East St. Louis, Ill., the minimum rate is 58½ cents per hour.

In the locality consisting of the States of Wisconsin, Illinois (except the area in and about East St. Louis, Ill.), Michigan, and Indiana the minimum rate is 62½ cents per hour.

In the locality consisting of Ohio, Pennsylvania, Delaware, Maryland, Kentucky, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, and Maine, and that portion of the State of West Virginia comprised within the counties of Hancock, Brooke, Ohio, Marshall, Harrison, and Monongalia, and the District of Columbia, the minimum rate is 62½ cents per hour.



BOBBINET WAGE DETERMINATION UNDER PUBLIC CONTRACTS ACT

THE twenty-first wage determination under the public contracts law (Walsh-Healey Act) covers minimum prevailing wages of workers engaged in the manufacture of bobbins to fulfil Government contracts.¹ Rates of pay are fixed at 37½ cents an hour or \$15 per week of 40 hours

¹ U. S. Department of Labor. Division of Public Contracts. Press release No. 622, January 28, 1939.

under the terms of this determination, which became effective on February 13, 1939.

This determination covers the manufacture of the products of the bobbinet machines, including what is commonly known as unbleached bobbinet or mosquito netting as described on Federal specifications.

Evidence introduced at hearings showed that there are only five companies manufacturing bobbinets in the United States, of which two are located in New York and one each in Pennsylvania, New Jersey, and Rhode Island. The total employment is about 700.



APPLICATION OF HOURS DECREES IN FRANCE¹

THE workweek in France was increased from 5 to 6 days by a decree law of November 12, 1938, for all establishments except those authorized by the Minister of Labor to operate on a 5-day schedule.² That law, while maintaining the principle of the 40-hour week established in 1936, authorized the working of additional hours, within prescribed limits, in order to secure increased national production. Thirty-five decrees were issued December 31, 1938, setting forth details of application of the modified working hours, to bring earlier laws into line with the November decree. Three of these decrees were of general application.

The provision in the November decree that the 5-day week could be worked only after authorization by the Minister of Labor gave rise to protests from labor, and in some cases from employers, and as a result, shortly after the decree was issued, the Minister stated that in providing for weekly hours based on a 6-day week, it was not intended absolutely to prohibit the practice of working five 8-hour days. Accordingly, an order by the Minister of Labor and the Minister of Public Works was issued on December 31, authorizing the 5-day week in establishments or parts of establishments in which the actual working week does not exceed 38 hours, if the establishment has no direct contact with the public and is not subject to variations in activity because of weather conditions. In such establishments, when the working hours exceed 38 but are less than 45 a week, authorization to continue on the 5-day week is considered as granted if the labor inspector has not refused the request of the head of the establishment within a period of 8 days. This authorization may be granted also to establishments having no direct contact with the public, in which the activities are affected by weather conditions, if the working hours do not exceed 45 per week. Establishments having direct contact with the

¹ Data are from report of Edwin C. Wilson, American Chargé d'Affaires ad interim, Paris, January 9, 1939; and *Journal Officiel* (Paris), issues of January 1, 3, and 7, 1939.

² For the provisions of that law, see *Monthly Labor Review*, January 1939 (p. 137).

public, and others in which the working week exceeds 45 hours, must receive special authorization if the 5-day week is worked.

The decree of May 24, 1938,³ fixing the method of making up time lost in an establishment because of a collective interruption of work for reasons other than a labor dispute, and the procedure to be followed in the authorization of supplementary hours in such cases, is amended to provide that the additional hours may not increase the working time in the establishment to more than 9 hours per day and 48 hours per week.

Organization of the working force by shifts and by rotation of workers can be authorized provisionally by the labor inspector after consultation with the employers' and workers' organizations concerned, but final authorization is given by the Minister of Labor. The authorization must fix the special methods of control of the duration of work, and in case the work is organized by shifts, must fix the maximum length of the workday for each employee as well as for the establishment. The labor inspector may authorize a division of the working hours which does not exceed an average of 40 hours in a 3-week period, but the hours may not exceed 9 per day without special authorization by the labor inspector. During the period in which such hours are worked, and for one month thereafter, the employer may not discharge any regular employee because of lack of work.

The remaining decrees modify the schedules of hours in particular cases, longer hours being allowed in certain industries, such as stores, because of the intermittent character of the work. Five methods of dividing the workweek are provided for retail stores. In retail trade except food stores, the decree provides that 42 hours shall be considered as equivalent to 40 hours of effective work. These hours of overtime can be used to make up time lost for holidays other than the statutory holidays with pay. The number of hours between the beginning and end of the workday may not exceed 10 hours for entire days and 5 hours for half days. The principle of rotation is adopted in order to allow the stores to remain open on six days. In grocery stores provision is also made for rotation of workers, but the total amount of time spent at work may not be interrupted by more than two rest periods, and may not exceed 12 hours for whole days and 6 hours for half days (13 and 6½, respectively, in dairy stores).

The maximum duration of presence of workers in hotels, cafes, and restaurants is fixed at 45 hours for cooks and 50 hours per week for other employees. In seasonal resorts, the hours of cooks are fixed at 50 per week, and those of other workers at 56. These hours may be worked for a period of 5 consecutive months if there is one season, and in two periods of 3 consecutive months each, if there are two seasons.

³ See Monthly Labor Review, August 1938 (p. 394).

In retail drug stores, 42 hours (44 hours, if there is only one employee) are considered as equivalent to 40 hours' effective work. The total daily hours of work, including rest periods, may not exceed 11.

The 6-day week is to be in effect for port workers, and many exceptions are made in arranging hours, in order to meet the demands of the shipping industry.

A decree providing general regulations for the taxicab industry in Paris establishes a 10-hour day, but owners of single cabs driven by themselves may work 11 hours.

The ten decrees revising earlier decrees relating to working hours in different kinds of mining operations, provide in general for only minor changes. For underground mines the maximum workday remains 7 hours and 45 minutes, and hours are not extended beyond the previous 38 hours and 40 minutes per week. The 5-day week is still authorized, but a choice is given of working a 5½- or a 6-day week. A 10-percent increase over the regular rate is paid for overtime.

REGULATION OF HOURS OF YOUNG PERSONS IN GREAT BRITAIN

HOURS of employment of persons under 18 years of age were shortened in a number of occupations by the terms of legislation adopted in both Great Britain and Northern Ireland in 1938.¹

Great Britain.—The law of Great Britain became effective on January 1, 1939. Employment of young persons under 18 years of age is thereby limited to 48 hours per week, and for those under 16, a 44-hour week is prescribed after December 31, 1939.

Young persons of these ages who are covered by this act are those employed (1) in the collection or delivery of goods, or in any incidental carrying, loading, or unloading; (2) in messenger work outside the premises of a business; (3) in messenger work in a hotel or club; (4) in messenger work in a newspaper publishing house; (5) in messenger work at a place of public entertainment, amusement, swimming pool, etc.; (6) in a private dwelling as an operator of a power-run elevator; (7) in the operation of motion-picture projection equipment; (8) in receiving and dispatching goods in a laundry, dyeing, or cleaning establishment. If the hours of work of young persons are regulated by other laws, or such persons are employed in or in connection with agriculture or in a ship, they are not subject to the terms of this law.

The law also requires that at least half an hour must be allowed for a meal or rest, after 5 hours of continuous employment, and that

¹ Great Britain (Laws, Statutes, etc.), Young Persons (Employment) Act, 1938 (1 and 2, Geo. 6, ch. 69); Northern Ireland, Acts of Parliament, Factories Act (2 Geo. 6, ch. 23); Great Britain, Ministry of Labor Gazette, September 1938.

three-quarters of an hour must be allowed for dinner if the employment covers the period between 11:30 a. m. and 2:30 p. m. A weekly half-holiday and a whole holiday on Sunday or some other day are required.

Persons over 16 may work overtime 6 hours in 1 week or 50 hours in a year, but the maximum number of weeks during which overtime may be worked in 1 year is 12. Overtime is prohibited for persons under 16, who may not work in excess of 44 hours a week after the first year of operation under the law.

The new law also amends the Shops Act, 1934, the amendment to become effective January 1, 1940, making a 44-hour week (instead of 48 hours) the maximum for young persons under 16 years of age employed in shops, except that hours may be averaged in a 2-week period including Christmas week.

Northern Ireland.—Special legislation adopted in Northern Ireland placed the same restrictions on the working hours of young persons. The occupational coverage includes employment in collecting, carrying or delivering goods, carrying messages or running errands for a factory but mainly outside the factory; employment in connection with any business carried on at a dock, wharf or quay, or any warehouse except where it is a part of a factory; employment by a person occupying a dock, wharf, quay or warehouse, or premises within it or forming part of it; and employment in connection with any process carried on at any dock, etc., by a person having the use of it or in connection with loading, unloading, or fueling ships in any dock, harbor, or canal.

In establishing the 44-hour week, effective after 1 year from commencement of the act, for young persons under 16 years of age, the law of Northern Ireland further provides that the Minister of Labor may prescribe longer hours if it is determined that such employment would not be injurious to the workers, if short hours for young persons would seriously affect the carrying on of a particular industry or process, and if it can be shown that a process is particularly suitable for young persons as a means of training them for permanent employment in the industry.

The Factories Act (Northern Ireland) becomes effective July 1, 1939, at which time the 48-hour week for young persons will also be applied. Introduction of the 44-hour week for young persons who have not attained the age of 16 will be postponed until a year later.

Wages and Hours of Labor

WAGES AND HOURS IN THE FERTILIZER INDUSTRY, 1938¹

Summary

ALTHOUGH hourly earnings of all workers in the fertilizer industry averaged 32.6 cents during the spring season of 1938, they ranged all the way from less than 7½ cents to over \$1 per hour. The weekly hours averaged 45. Weekly earnings amounted to \$14.67.

Of the total number of employees covered, 26.1 percent earned less than 25 cents an hour, and 55.1 percent were paid under 30 cents. There were 68.7 percent receiving less than 40 cents.

The fertilizer industry is largely located in the southern States. Its labor force is predominantly composed of unskilled workers, who constituted 72 percent of the total labor force. It is also largely composed of Negroes, who formed 77 percent of the total, as compared with 23 percent white workers.

These facts were found in the first field survey ever made by the Bureau of Labor Statistics of wages and hours in the fertilizer industry. The survey covered 283 establishments and 15,657 wage earners.

Scope and Method of Survey

DEFINITION OF INDUSTRY

The plants surveyed were those falling within the fertilizer industry as it is defined in the Census of Manufactures. According to that definition, the industry includes establishments "engaged primarily in the production of commercial fertilizers, of which the principal classes are complete fertilizers (mixtures of superphosphates, potash, and ammoniates) and superphosphates." It does not include the merchandising of fertilizer materials in the natural state or tankage from meat-packing establishments used without further processing.²

¹ More detailed information, of which this article is a summary, is published in a pamphlet entitled "Wages and Hours in the Fertilizer Industry, 1938" (Serial No. R. 864), a copy of which may be obtained on request. This pamphlet was prepared by J. Perlman, O. R. Witmer, H. O. Rogers, and P. L. Jones, of the Bureau's Division of Wage and Hour Statistics.

² The survey also excluded firms engaged in the mining and grinding of phosphate rock for sale to fertilizer plants.

The modern fertilizer industry dates from about the middle of the last century, when the process of treating mineral phosphates with sulphuric acid to form superphosphates was discovered. Although the acidulation of phosphate rock furnishes one of the essential fertilizer ingredients, the industry also comprehends two other processes, namely, the manufacture of sulphuric acid and the mixing, in varying proportions, of superphosphates with other ingredients, such as potash, ammoniates, or nitrates, and fillers to make complete fertilizers.

Depending upon the integration of the three processes involved, there are also three types of fertilizer establishments, namely acid-making, superphosphate, and dry-mixing plants. Acid-making establishments are completely integrated plants, which manufacture their own sulphuric acid and superphosphates and mix the various fertilizer ingredients. Superphosphate or wet-mixing establishments purchase their acid requirements, but they make their own superphosphates and mix them with the other ingredients. On the other hand, dry-mixing plants manufacture none of the conventional fertilizer ingredients, being engaged only in mixing purchased materials.

SALIENT FEATURES OF INDUSTRY

Judged by American standards, the fertilizer industry is not very large, whether measured in terms of employment or of value of products. In 1937, the latest year for which figures³ are available from the Census of Manufactures, the industry showed an average of 20,893 wage earners, but at the peak of seasonal production it provided employment for considerably more workers. The value of products made in fertilizer plants amounted to \$195,759,025 in 1937. This figure, however, is subject to wide fluctuations, varying with farm income, as may be seen from the fact that it ranged from \$232,510,936 in 1929 to \$94,939,311 in 1933.

The present survey was made on a sample basis, covering 283 establishments and 15,657 wage earners. It is estimated that, at the time of the survey during the spring months of 1938, the number of workers included about two-fifths of the total labor force in the industry. Among the factors considered in selecting the sample were geographical distribution, type of plant, size of establishment, corporate affiliation, size of community, and unionization of workers.

As freight costs represent a substantial portion of the price paid by the farmer for fertilizers, close proximity to the principal marketing areas has been the main factor in determining the regional distribution of the industry. One of the most distinctive features of the latter, therefore, is its marked concentration in the southeastern coastal States,

³ These cover only establishments with a value of product of \$5,000 and over.

where the exhaustion of the soil, due primarily to the growing of one crop, such as tobacco or cotton, as well as to soil erosion, has created a great demand for fertilizers. Nevertheless, an important portion of the industry is scattered throughout much of the remainder of the country, especially the northern States east of the Mississippi River. The survey covered the 24 leading fertilizer States.⁴

By far the great majority of the establishments in the industry are dry-mixing plants. Of the 283 establishments in the sample, 35 were acid-making, 42 superphosphate, and 206 dry-mixing plants. In terms of the number of workers, the figures were respectively 4,927 (31.5 percent), 3,083 (19.7 percent), and 7,647 (48.8 percent). It will thus be seen that size of establishment tended to vary directly with degree of integration, the average number of employees being 141 for acid-making, 73 for superphosphate, and 37 for dry-mixing plants. It also should be pointed out that the survey did not cover any establishments with fewer than 10 workers; the largest plant employed slightly over 400 wage earners.

Concentration of ownership is an important factor in the industry. First, it is customary to consider the "Big 7" companies, each having a large number of establishments scattered over the country. In addition, there is a substantial number of intermediate companies, each of which has 2 or more plants in the industry. The remaining group may be termed 1-establishment companies. Of the 283 plants in the sample, 60 belonged to the "Big 7," 72 to the intermediate group, and 151 to the 1-establishment firms; they employed 35.5, 28.9, and 35.6 percent, respectively, of the total employees covered. Measured in production, however, the "Big 7" companies are vastly more important than is indicated by the relative number of their employees. To a lesser degree this is also true of the intermediate companies.

It is also essential to point out that degree of integration tends to vary directly with concentration of ownership. Of the 35 acid-making plants in the sample, 21 belonged to the "Big 7," 7 to the intermediate, and 7 to the 1-establishment companies, the distribution being respectively 57.4, 27.3, and 15.3 percent of the employees in acid-making plants. Of the 42 superphosphate establishments, 19 belonged to the "Big 7" companies, which also employed 44.8 percent of the workers. In this group, however, the 1-establishment concerns were more important than the intermediate companies, the former accounting for 13 plants and 32.7 percent of the employees and the latter for 10 establishments and 22.5 percent of the workers. Conversely, of the 206 dry-mixing plants, 20 belonged to the "Big 7," 55 to the intermediate, and 131 to the 1-establishment companies, the distribution of employees being respectively 17.6, 32.5, and 49.9 percent.

⁴ See table 3, p. 674.

The fertilizer industry is fairly well distributed by size of community.⁵ Of the 283 establishments in the sample, 53 were located in rural territory, or places with a population of under 2,500, but these plants employed only 9.3 percent of the total workers. A substantial number of establishments, namely 65, were also found in the small towns of 2,500 and less than 10,000 population, which accounted for 11.9 percent of the total employees. There were 87 plants, with 35.9 percent of the workers, in communities of 10,000 and under 100,000, and 55 establishments with 26.2 percent of the employees were located in metropolitan areas of 100,000 and less than 500,000. Lastly, 23 plants employing 16.7 percent of the workers appeared in the large metropolitan areas of 500,000 and over.

It should be noted that there is also a tendency for the dry-mixing plants to concentrate largely in the smaller communities, while the integrated establishments are found mostly in the more populous places. Of the 35 acid-making plants, only 1 was located in a community with a population of under 10,000, 14 were in communities of 10,000 and less than 100,000, and 20 in communities of 100,000 and over, the distribution of employees being respectively 4.0, 33.9, and 62.1 percent. Of the 42 superphosphate establishments, 6 with 15.8 percent of the workers were in places of under 10,000, 13 with 30.5 percent in places of 10,000 and less than 100,000, and 23 with 53.7 percent in places of 100,000 and over. On the other hand, of the 206 dry-mixing plants, 111 were found in areas of under 10,000, 60 in areas of 10,000 and less than 100,000, and 35 in areas of 100,000 and over; the distribution of employees was 34.5, 39.3, and 26.2 percent, respectively.

It follows, therefore, that the tendency is for the 1-establishment concerns to be found mostly in the smaller communities, while the larger companies are concentrated more in the metropolitan areas. Of the 60 establishments belonging to the "Big 7", only 5 with 6.5 percent of the total employees were in communities with a population of under 10,000, 25 with 36.7 percent in communities of 10,000 and less than 100,000, and the remaining 30 with 56.8 percent in communities of 100,000 and over. Of the 72 intermediate companies, 24 were found in areas of under 10,000, 23 in areas of 10,000 and less than 100,000, and 25 in areas of 100,000 and over; the distribution of workers was, respectively, 15.2, 33.9, and 50.9 percent. In contrast, of the 151 one-establishment concerns, 89 with 40.8 percent of the employees

⁵ Communities were classified according to size on the basis of metropolitan areas. For places with a population of 100,000 or more, the Bureau of Labor Statistics followed the metropolitan district classification of the Bureau of the Census. On the other hand, for areas with less than 100,000 population, the Bureau of Labor Statistics established similar metropolitan areas, including not only the population within a political subdivision, but also that of the outlying area. In other words, an attempt was made here to classify communities according to labor market areas, within which there is competition among workers for jobs, as well as among employers for workers, thus influencing the wage levels.

were in places of under 10,000, 39 with 36.6 percent in places of 10,000 and less than 100,000, and only 23 with 22.6 percent in places of 100,000 and over.

In other words, there is a marked contrast between establishments belonging to the "Big 7" and the 1-plant companies. On the whole, the former are mostly of the integrated type⁶ and are located mainly in the more populous communities. On the other hand, the latter are mostly dry-mixing establishments and are located largely in the less populous centers. The plants of the "Big 7" also differ from the 1-establishment concerns in other respects. For example, a number of the large companies control their own raw materials, such as phosphate rock and nitrates, and to a limited extent organic nitrogen carriers, in addition to producing superphosphates. In contrast, nearly all of the 1-establishment concerns have to buy their superphosphates and other materials. Furthermore, there is keen competition between the large and small companies, especially with respect to certain local markets where the 1-plant companies have a distinct advantage in being able to adapt their formulas to the more highly specialized requirements emanating from the peculiarities of the soil.

The position of the intermediate companies, however, is not so clear-cut with respect to the above characteristics. As regards integration, most of their plants are of the dry-mixing type, thus resembling more nearly the 1-establishment companies. On the other hand, the plants of the intermediate companies have a tendency to concentrate in the more populous communities, in which respect they resemble more nearly those of the "Big 7" concerns. As regards control over raw materials and superphosphates, the intermediate companies are in some instances in the position of the "Big 7," while in other cases they occupy the position of the 1-establishment companies. Nevertheless, the part played by the intermediate companies cannot be minimized, as they constitute an important segment of the industry.⁷

Of the 283 establishments in the sample, 6 (with 6 percent of the employees) were operating under trade-union agreements at the time of the survey. All of these plants were located in communities with a population of 100,000 and over. Of the 6 union locals involved, 3 were affiliated with the American Federation of Labor and the other 3 with the Congress of Industrial Organizations.

Another distinguishing feature of the industry is the extreme simplicity of its manufacturing processes, especially in mixing fertilizers. As a result, manpower requirements have been reduced to a minimum, and most of the work is now being done by mechanical devices capable of handling large quantities of bulk materials. In the early days, the

⁶ In a sense, all plants belonging to the "Big 7" are fully integrated, since each company makes both acid and superphosphates that can be supplied to all of its establishments.

⁷ One of the characteristics of the intermediate companies, furthermore, is that some of them are a part of large concerns in other industries. Likewise, nearly all of the "Big 7" companies are integrated with other industries.

hand shovel was the tool universally used in the mixing of fertilizer. At the present time, the unloading or moving of materials within the plant is being done by power shovels and cranes, chain elevators, conveyor belts, etc. Special excavating and cutting machines, and mixing, bagging, automatic weighing, and sewing machines have also replaced hand work. In some of the small establishments, however, because of the shortness of the production season and small volume of sales, the installation of certain types of machines is not always justified, and many hand workers are therefore still employed.

As will be pointed out later, a further peculiarity of the fertilizer industry is the large proportion that unskilled workers and Negroes form in the labor force.⁸ It is also important to note that in rural areas and small towns many of the employees are agricultural laborers, who are drawn into the plants to work during the peak season.

Still another outstanding characteristic of the fertilizer industry is its extreme seasonality. Although there is a small amount of seasonal activity in this industry in certain parts of the country before the fall planting, by far the most important season occurs prior to planting in the spring months. This season extends over the months of March, April, and May, traveling progressively from the extreme southern to extreme northern States. In the majority of the States, however, it occurs during the latter part of March and the greater part of April. In making this survey, the information obtained covered in most cases the peak seasonal activity in the various regions. In some of the integrated plants, it is customary to carry on the production of acid and superphosphates during the months prior to the season, which made it necessary to obtain supplementary information for those months.⁹

Average Hourly Earnings

METHODS OF WAGE PAYMENT

Nearly all wage earners (99.8 percent) studied in the fertilizer industry were paid on a straight time-rate basis. Indeed, this was the exclusive method of payment in 277 of the 283 plants for which information was obtained. In the remaining 6 establishments, some piece-rate workers were employed, but even there by far the largest majority were time workers. Production-bonus systems of wage payment were not reported by any of the plants covered.¹⁰

⁸ In the plants studied, there were 17 females, all of whom were engaged on unskilled, light operations, but they were excluded from the tabulations contained in this report.

⁹ In these establishments, the same employees worked in the preparation of acid, superphosphates, and mixed fertilizers progressively during the respective production parts of the year. In order to eliminate duplication, therefore, each of these workers was allocated to one or the other of the reported occupations, so that each occupation was represented in the proper proportion.

¹⁰ The figures on earnings in this report do not include the value of perquisites, but very little of these are furnished to employees in the industry. In 12 establishments, some of the workers were given free houses, including free electric light and fuel in several instances. In 4 other plants, houses were rented to employees at reduced rates. Respirators were distributed without cost to such persons as required them in their work by 4 establishments, 2 of which also gave free boots and gloves. Six plants paid all or part of the premiums on group insurance, and 1 establishment furnished free medical services.

Extra rates of pay for overtime were not general in the industry. In 51 establishments, however, overtime was paid for at rates either of time and one-third or time and one-half.¹² Of these plants, 20 were operated by the "Big 7," 13 by the intermediate companies, and 18 by the 1-establishment concerns. Extra overtime rates were provided for in 5 of the 6 establishments operating under trade-union agreements. Overtime was prohibited as a matter of policy by the management in 9 plants. In the remaining 223 establishments, all wage earners working beyond the regular scheduled hours received their usual time rates.¹³

SUMMARY FOR INDUSTRY AS A WHOLE

In the spring of 1938, the earnings of the 15,657 workers covered in the 283 fertilizer manufacturing plants averaged 32.6 cents an hour. However, there is a large measure of variability behind this average, as may be seen from the distribution of individual earnings shown in table 1.

Apart from the wide range of individual hourly earnings, the most significant feature of table 1 is the concentration of the industry's labor force in the low-earnings classes. Over one-fourth (26.1 percent) of all workers earned less than 25 cents an hour, and considerably more than one-half (55.1 percent) were paid under 30 cents. Nearly seven-tenths (68.7 percent) received less than 40 cents. There was a small scattering of employees in the upper-earnings classes, but nine-tenths (89.9 percent) earned under 52.5 cents.

The largest proportion of workers in any one class, accounting for over one-fourth (26.7 percent) of the total, was found between 25 and 27.5 cents. In terms of 5-cent intervals, the distribution still shows the major concentration between 22.5 and 27.5 cents, with minor concentrations in the classes of 37.5 to 42.5 cents and 47.5 to 52.5 cents.

¹² Extra earnings due to overtime were taken into consideration in computing average hourly earnings. Most of the overtime was found in the Northern wage region, but the additional earnings due to it would affect the average for that region by less than 1 cent.

¹³ Overtime compensation, either on a pro-rata or extra-rate basis, usually did not apply to salaried employees, who were expected to do the extra work without additional remuneration.

TABLE

Number

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17.5 and
22.5 and
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TABLE 1.—Percentage Distribution of Fertilizer Workers, by Average Hourly Earnings and by Skill, During Spring Months of 1938

Average hourly earnings	Total workers	Skilled workers	Semi-skilled workers	Unskilled workers
Number of workers.....	15, 657	939	3, 402	11, 316
Under 7.5 cents.....	0.3	-----	0.2	0.3
7.5 and under 12.5 cents.....	1.9	-----	1.0	2.3
12.5 and under 17.5 cents.....	10.2	0.4	5.7	12.4
17.5 and under 22.5 cents.....	12.5	.9	7.5	15.0
22.5 and under 25.0 cents.....	1.2	.3	1.3	1.3
25.0 and under 27.5 cents.....	26.7	3.2	17.9	31.2
27.5 and under 30.0 cents.....	2.3	2.3	5.0	1.5
30.0 and under 32.5 cents.....	5.3	4.5	7.9	4.5
32.5 and under 35.0 cents.....	1.3	1.7	1.8	1.1
35.0 and under 37.5 cents.....	5.8	4.6	5.2	6.1
37.5 and under 40.0 cents.....	1.2	1.6	2.1	.9
40.0 and under 42.5 cents.....	8.4	5.0	6.3	9.4
42.5 and under 47.5 cents.....	6.2	6.1	9.5	5.2
47.5 and under 52.5 cents.....	6.6	8.8	11.8	4.9
52.5 and under 57.5 cents.....	3.1	8.9	6.7	1.5
57.5 and under 62.5 cents.....	2.8	10.5	4.6	1.7
62.5 and under 67.5 cents.....	1.5	6.5	3.1	.6
67.5 and under 72.5 cents.....	.7	7.3	.9	.1
72.5 and under 77.5 cents.....	.6	7.5	.6	(1)
77.5 and under 82.5 cents.....	.5	7.5	.4	(1)
82.5 and under 90.0 cents.....	.4	4.4	.5	-----
90.0 and under 100.0 cents.....	.3	4.0	(1)	(1)
100.0 cents and over.....	.2	4.0	-----	(1)
Total.....	100.0	100.0	100.0	100.0

¹ Less than $\frac{1}{10}$ of 1 percent.

One cause of the dispersion of hourly earnings in the fertilizer industry is the distinctly different wage levels of the 3 skill-groups (table 2). Compared with an average of 57.6 cents for skilled workers, the earnings of the semiskilled averaged 36.4 cents, and the average of the unskilled was 28.7 cents. The difference between the average earnings of the skilled and semiskilled employees is thus quite pronounced, namely 21.2 cents, while the one between the semiskilled and unskilled is 7.7 cents.

TABLE 2.—Average Hourly Earnings in the Fertilizer Industry, by Region, Race, and Skill, During Spring Months of 1938

Region and race	Number of workers				Average hourly earnings			
	All workers	Skilled workers	Semi-skilled workers	Unskilled workers	All workers	Skilled workers	Semi-skilled workers	Unskilled workers
United States.....	15, 657	939	3, 402	11, 316	\$0. 326	\$0. 576	\$0. 364	\$0. 287
White.....	3, 660	795	1, 201	1, 664	.461	.613	.449	.390
Negro.....	11, 997	144	2, 201	9, 652	.281	.398	.319	.268
Northern wage district.....	4, 012	415	1, 228	2, 369	.508	.702	.521	.460
White.....	2, 294	387	715	1, 192	.519	.709	.524	.447
Negro.....	1, 718	28	513	1, 177	.491	(1)	.517	.474
Southern wage district.....	11, 645	524	2, 174	8, 947	.263	.483	.283	.241
White.....	1, 366	408	486	472	.368	.524	.338	.248
Negro.....	10, 279	116	1, 688	8, 475	.248	.356	.269	.240
Upper Southern wage district.....	2, 174	122	472	1, 580	.363	.555	.376	.340
White.....	281	91	93	97	.441	.592	.412	.312
Negro.....	1, 893	31	379	1, 483	.351	(1)	.367	.342
Lower Southern wage district.....	9, 471	402	1, 702	7, 367	.240	.463	.258	.219
White.....	1, 085	317	393	375	.350	.506	.320	.232
Negro.....	8, 386	85	1, 309	6, 992	.224	.323	.241	.219

¹ Not a sufficient number of workers to present averages.

INFLUENCE OF GEOGRAPHICAL LOCATION

The average hourly earnings are presented, by States, in table 3. In some States, it will be noted, the coverage is relatively small, which limits the significance of the averages for those States. The State figures, however, may be used to develop certain broad regional classifications for the presentation of the data.

TABLE 3.—Average Hourly Earnings in the Fertilizer Industry, by Region and State, During Spring Months of 1938

Region and State	Number of plants	Number of workers	Average hourly earnings
United States.....	283	15,657	\$0.326
Northern wage district.....	78	4,012	.508
Connecticut.....	4	238	.444
Illinois.....	3	240	.539
Indiana.....	5	150	.422
Maine.....	7	214	.378
Massachusetts.....	4	137	.486
Michigan.....	3	182	.624
New Jersey.....	12	658	.558
New York.....	6	188	.485
Ohio.....	12	564	.505
Pennsylvania.....	11	287	.456
Western shore of Maryland and northern Delaware.....	11	1,154	.516
Southern wage district.....	205	11,645	.263
Upper Southern wage district.....	29	2,174	.363
Eastern Shore of Maryland and southern Delaware.....	8	199	.260
Kentucky ¹	3	188	.360
Tennessee.....	4	343	.337
Virginia.....	14	1,444	.385
Lower Southern wage district.....	176	9,471	.240
Alabama.....	19	1,048	.231
Arkansas.....	4	110	.192
Florida.....	15	818	.308
Georgia.....	60	2,850	.218
Louisiana.....	4	245	.273
Mississippi.....	6	244	.217
North Carolina.....	29	2,145	.250
South Carolina.....	32	1,860	.239
Texas.....	7	151	.259

¹ Includes 1 plant in southern Indiana.

DIFFERENCES BETWEEN WHITE AND NEGRO WORKERS

Outstanding among the characteristics of the fertilizer industry is the high proportion of Negro workers employed. Indeed, this industry is one of the few in which colored workers predominate. Of the 15,657 wage earners included in the present survey, 11,997 were Negroes. This means that for the industry, as a whole, about 3 out of 4 workers employed were colored.

The proportion of Negro workers differs from wage region to wage region. In the Southern wage region, virtually nine-tenths of the wage earners were Negroes. In this respect, of predominance, there was very little difference between the Upper Southern and Lower Southern wage areas. Among the northern plants, on the other hand, colored workers constituted 43 percent of the wage earners employed.

In view of the presence of a considerable number of both white and colored workers in the fertilizer industry, any differences in earnings as between whites and Negroes are of interest. It should be noted, however, that the wages of any group of employees are a product of two factors, one being the hourly earnings and the other the number receiving the various earnings. Hence, any comparison of wages must take into account as far as possible the differences between white and colored workers as regards occupational opportunities and rates of pay in a given occupation.

The number of employees receiving the various hourly earnings is determined to a large extent by the skill composition of the labor force. Although colored workers predominate in numbers in the industry's labor force, relatively few were found in the skilled jobs. The representation of Negroes among skilled employees was especially meager in the Northern wage region, where they constituted only 7 percent of the total. The ratio of skilled colored employees to the total skilled workers was 25 percent in the Upper Southern and 21 percent in the Lower Southern wage area. On the other hand, Negroes were relatively numerous among semiskilled employees, the figures being 42 percent in the Northern, 80 percent in the Upper Southern, and 77 percent in the Lower Southern wage regions. Finally, colored workers were proportionately most prevalent in unskilled occupations, of which they formed 50 percent in the Northern, 94 percent in the Upper Southern, and 95 percent in the Lower Southern wage districts. The presence of a proportionately larger number of Negroes than whites in the semiskilled and unskilled groups naturally results in a greater number of lower-paid employees among the former as compared with the latter.

As a general rule whites and Negroes were not found on the same job in the same plant. There were, however, a number of establishments in which white and colored employees worked side by side at one or more occupations. For the country as a whole, 22 percent of the whites and 19 percent of the Negroes worked on the same occupation in the same plant. The proportions varied somewhat by region, the respective percentages being 22 and 35 for the Northern, 29 and 20 for the Upper Southern, and 20 and 15 for the Lower Southern wage areas.

In general, no differences in hourly rates were found to exist between white and colored employees who worked side by side at the same occupation in the same plant. On that basis, it was found that for the country as a whole 94 percent of the colored employees and 93 percent of the whites received the same hourly earnings. Moreover, the situation was essentially the same in all parts of the country.

It would require too exhaustive an analysis to determine whether or not whites and Negroes engaged in the same work but in different plants received the same hourly earnings. This is due to the fact that

any such tabulation would have to be made on the basis of individual occupations closely matched and limited to more or less comparable plants. Substantial wage differences might well reflect no more than regional differences in hourly earnings or differences due to other factors.

The number of workers of each race found in the various occupations in the plants covered, by region, is shown in table 4.

TABLE 4.—*Distribution of Fertilizer Workers by Race, Region, Skill, and Occupation*

Region, skill, and occupation	Northern wage district			Upper Southern wage district			Lower Southern wage district		
	Total	White	Negro	Total	White	Negro	Total	White	Negro
All workers.....	4,012	2,294	1,718	2,174	281	1,893	9,471	1,085	8,386
Skilled workers.....	415	387	28	122	91	31	402	317	85
Maintenance mechanics.....	158	152	6	39	35	4	100	83	17
Supervisors.....	163	155	8	65	52	13	276	222	54
Miscellaneous skilled workers.....	94	80	14	18	4	14	26	12	14
Semiskilled workers.....	1,228	715	513	472	93	379	1,702	393	1,309
Acid chambermen.....	41	29	12	17	9	8	62	18	44
Baggers.....	232	120	112	79	7	72	310	21	289
Bag printers.....	31	21	10	30	10	20	79	27	52
Bag sewers.....	222	119	103	127	8	119	414	16	398
Car runners and conveyor operators.....	109	47	62	37		37	78	5	73
Clerks.....	61	55	6	17	11	6	58	51	7
Dry mixer operators.....	93	48	45	33	1	32	142	37	105
Helpers, maintenance mechanics.....	82	68	14	13	5	8	77	29	48
Rock grinders.....	29	16	13	15	1	14	40	7	33
Scalemen.....	91	64	27	40	21	19	159	77	82
Superphosphate mixers.....	27	9	18	8	1	7	44	7	37
Truck and tractor drivers.....	100	73	27	33	15	18	106	50	56
Miscellaneous semiskilled workers.....	110	46	64	23	4	19	133	48	85
Unskilled workers.....	2,369	1,192	1,177	1,580	97	1,483	7,367	375	6,992
Acid-department workers, unskilled.....	53	17	36	14	1	13	61	2	59
Cart pushers.....	804	420	384	867	22	845	2,026	59	1,967
Den diggers.....	148	48	100	71	3	68	123	2	121
Laborers, dry mixing.....	567	344	223	381	35	346	3,925	144	3,781
Shovelers, hand.....	207	94	113	55	1	54	374	11	363
Stowers, bags of fertilizer.....	266	111	155	88	6	82	325	11	314
Substandard workers and learners.....	4	2	2	1		1	78	6	72
Watchmen.....	78	71	7	28	22	6	127	112	15
Miscellaneous unskilled workers.....	242	85	157	75	7	68	328	28	300

INFLUENCE OF SIZE OF COMMUNITY, CORPORATE AFFILIATION, AND TYPE OF PLANT

Hourly earnings in the fertilizer industry varied directly with size of community (table 5). It will be noted, however, that earnings in the larger communities in the Upper Southern wage district resemble the wage levels prevailing in the smaller communities in the Northern wage district. In the Lower Southern wage district, average earnings in even the larger communities were much below the level of the smallest communities in the Northern wage area, but they roughly approximated the averages shown for the two smallest-size groups in the Upper Southern district.

In the Northern wage region, with two exceptions, the average earnings per hour increased with size of community, the total spread being from 36.4 cents in rural territory (with a population of under 2,500)

to 59.0 cents in the metropolitan areas of 1,000,000 and over. One of the exceptions related to small towns of 2,500 and less than 5,000, which averaged even more than communities of 25,000 and under 50,000. The other exception affected the metropolitan areas of 100,000 and less than 250,000, which averaged less than those with 50,000 and under 100,000.

A similar story is told by the figures relating to the Southern wage territory. In the Upper Southern wage district, although the average in rural territory exceeded that in small towns with 2,500 and under 5,000 population, both had lower averages than communities of 100,000 and less than 500,000, the only other places for which figures are shown. The spread between rural territory and metropolitan areas of 250,000 and under 500,000 amounted to 11.1 cents, while the widest range between small towns and largest communities was 15.6 cents. In the Lower Southern wage area, the rural territory also averaged slightly more than small towns. Furthermore, communities of 250,000 and less than 500,000 averaged slightly below those with 100,000 and under 250,000. However, with these exceptions, the hourly earnings increased with size of community. The widest range (between small towns and places of 100,000 and less than 250,000) was 13.2 cents.

TABLE 5.—Average Hourly Earnings in the Fertilizer Industry, by Size of Community and Region, During Spring Months of 1938

Size of community	Northern			Upper Southern			Lower Southern		
	Number of plants	Number of workers	Average hourly earnings	Number of plants	Number of workers	Average hourly earnings	Number of plants	Number of workers	Average hourly earnings
Total.....	78	4, 012	\$0. 508	29	2, 174	\$0. 363	176	9, 471	\$0. 240
Under 2,500 population.....	6	109	. 364	4	139	. 301	43	1, 208	. 183
2,500 and under 5,000 population.....	3	98	. 438	4	89	. 256	24	638	. 175
5,000 and under 10,000 population.....	16	395	. 371	1	20	(¹)	17	625	. 177
10,000 and under 25,000 population.....	7	111	. 372	2	105	(¹)	29	1, 545	. 213
25,000 and under 50,000 population.....	4	120	. 430	2	171	(¹)	13	1, 220	. 261
50,000 and under 100,000 population.....	5	106	. 461				25	2, 236	. 264
100,000 and under 250,000 population.....	4	231	. 437	5	374	. 359	13	925	. 307
250,000 and under 500,000 population.....	12	505	. 475	9	1, 000	. 412	12	1, 074	. 284
500,000 and under 1,000,000 population.....	8	1, 278	. 552	2	276	(¹)			
1,000,000 population and over.....	13	1, 059	. 590						

¹ Less than 3 plants; no average computed.

As mentioned before, there is a tendency for the larger companies to concentrate in the bigger metropolitan areas, whereas the 1-establishment concerns are found mostly in the smaller communities. In view of this, it is of interest to note to what extent size of company affects hourly earnings. This is shown by table 6 which presents the average hourly earnings by size of community and by corporate affiliation.

An examination of table 6 shows that, while for each size of company the average earnings per hour increased with size of community, on the whole there were also differences in favor of the "Big 7" over the intermediate firms as well as in favor of the latter over the 1-establishment companies for each size of community. One exception was found in metropolitan areas with a population of 100,000 and under 500,000 in the Northern wage region, where the average hourly earnings varied inversely with size of company. There were also 2 exceptions in the Lower Southern wage district, one in communities of less than 10,000 with the 1-establishment firms averaging slightly more than the intermediate companies, and another in places of 100,000 and under 500,000, with the intermediate firms averaging somewhat more than the "Big 7" companies.

If size of community is disregarded, however, the average earnings per hour vary pronouncedly with size of company in each wage region. In the Northern wage area the "Big 7" averaged 7.1 cents more than the intermediate, while the latter averaged 6.5 cents more than the 1-establishment companies. In the Upper Southern wage district the difference between the "Big 7" and intermediate plants amounted to 3.7 cents, as compared with a difference of 3.9 cents between the latter and the 1-establishment companies. Lastly, in the Lower Southern wage district, the "Big 7" averaged 3.5 cents more than the intermediate firms, and the difference between the intermediate and 1-establishment companies amounted to 3.3 cents.

TABLE 6.—Average Hourly Earnings in the Fertilizer Industry, by Region, Size of Community, and Corporate Affiliation, During Spring Months of 1938

Region, and size of community	"Big 7" companies			Intermediate companies			1-establishment companies		
	Number of plants	Number of workers	Average hourly earnings	Number of plants	Number of workers	Average hourly earnings	Number of plants	Number of workers	Average hourly earnings
Northern wage district.....	14	1,418	\$0.574	28	1,361	\$0.503	36	1,233	\$0.438
Under 10,000 population.....	1	49	(¹)	7	146	.407	17	407	.366
10,000 and under 100,000 population.....	1	43	(¹)	7	170	.431	7	124	.390
100,000 and under 500,000 population.....	3	149	.438	7	313	.465	7	274	.472
500,000 population and over.....	9	1,177	.600	7	732	.557	5	428	.507
Upper Southern wage district.....	8	929	.392	9	786	.355	12	459	.316
Under 10,000 population.....	1	100	(¹)	2	34	(¹)	6	114	.255
10,000 and under 100,000 population.....				2	210	(¹)	2	66	(¹)
100,000 and under 500,000 population.....	6	588	.409	5	542	.399	3	244	.369
500,000 population and over.....	1	241	(¹)				1	35	(¹)
Lower Southern wage district.....	38	3,213	.276	35	2,377	.241	103	3,881	.208
Under 10,000 population.....	3	213	.209	15	509	.170	66	1,749	.178
10,000 and under 100,000 population.....	24	1,997	.273	14	1,153	.237	30	1,851	.226
100,000 and under 500,000 population.....	11	1,003	.298	6	715	.300	7	281	.268
500,000 population and over.....									

¹ Less than 3 plants; no average computed.

As was pointed out before, there was a tendency for integrated establishments to appear largely in more populous areas, while dry-mixing plants were found mostly in smaller communities.

Weekly Hours and Earnings

In view of the fact that the survey was taken during the spring months of 1938, the weekly hours and earnings reflect conditions in the fertilizer industry at the peak of the season, being considerably higher than the respective figures that prevailed in other parts of the year.

TABLE 7.—Average Weekly Hours and Weekly Earnings in the Fertilizer Industry, by Region, Race, and Skill, During Spring Months of 1938

Region and race	Average weekly hours				Average weekly earnings			
	All workers	Skilled workers	Semi-skilled workers	Unskilled workers	All workers	Skilled workers	Semi-skilled workers	Unskilled workers
United States.....	45.0	51.5	52.0	42.4	\$14.67	\$29.67	\$18.91	\$12.15
White.....	47.9	50.5	50.6	44.8	22.12	30.96	22.72	17.46
Negro.....	44.1	56.6	52.7	42.0	12.40	22.55	16.83	11.23
Northern wage district.....	45.2	49.6	48.7	42.6	22.93	34.82	25.37	19.58
White.....	47.4	49.6	50.6	44.7	24.58	35.15	26.51	19.98
Negro.....	42.3	(1)	46.0	40.5	20.73	(1)	23.78	19.19
Southern wage district.....	44.9	52.9	53.8	42.3	11.82	25.59	15.26	10.18
White.....	48.9	51.4	50.7	44.9	17.99	26.96	17.14	11.12
Negro.....	44.4	58.4	54.7	42.2	11.00	20.77	14.72	10.13
Upper Southern wage district....	44.9	50.5	53.3	41.9	16.29	28.01	20.01	14.28
White.....	48.1	49.3	52.1	43.1	21.19	29.21	21.45	13.42
Negro.....	44.4	(1)	53.6	41.9	15.56	(1)	19.65	14.33
Lower Southern wage district....	45.0	53.7	54.0	42.4	10.80	24.86	13.94	9.30
White.....	49.1	52.0	50.3	45.4	17.16	26.32	16.11	10.53
Negro.....	44.4	60.0	55.1	42.2	9.97	19.41	13.29	9.24

¹ Not a sufficient number of workers to present averages.

For the country as a whole, the actual average weekly hours for all workers amounted to 45.0 (table 7). Practically the same average was found in each of the 3 regions, although the distribution according to weekly hours differed from one territory to another (table 8). In each of the 3 regions, the highest average hours worked were reported for skilled and semiskilled workers, with considerably lower figures for unskilled employees. This was true of both whites and Negroes.

TABLE 8.—Percentage Distribution of Fertilizer Workers, by Actual Weekly Hours Worked and by Region, During Spring Months of 1938

Weekly hours	United States	Northern wage district	Southern wage district		
			Total	Upper Southern wage district	Lower Southern wage district
Under 8.....	2.4	1.0	2.8	3.3	2.7
8 and under 16.....	5.9	3.8	6.6	6.1	6.7
16 and under 24.....	5.6	4.8	5.8	5.9	5.8
24 and under 32.....	6.9	5.6	7.4	6.6	7.5
32 and under 40.....	9.3	10.4	8.9	11.0	8.5
40 and under 44.....	11.0	17.0	9.0	10.3	8.7
44 and under 48.....	8.5	10.8	7.7	8.4	7.5
48 and under 52.....	11.4	13.6	10.7	8.5	11.2
52 and under 56.....	11.7	9.2	12.7	8.9	13.7
56 and under 60.....	8.2	8.7	8.1	7.8	8.1
60 and under 66.....	10.2	8.9	10.6	12.8	10.1
66 and under 72.....	5.4	3.8	5.9	7.6	5.5
72 and under 84.....	2.8	2.2	3.0	2.4	3.1
84 and over.....	.7	.2	.8	.4	.9
Total.....	100.0	100.0	100.0	100.0	100.0

The average weekly earnings for all workers in the industry were \$14.67 (table 7). According to the distribution in table 9, as many as one-sixth of the total (16.1 percent) earned under \$6 during the week scheduled, some of these low earnings being due to part-time work, others to extremely low hourly earnings, and still others to a combination of both factors. Another sixth (16.9 percent) received between \$6 and \$10, so that one-third (33.0 percent) were paid less than \$10. Nearly another third (31.1 percent) earned between \$10 and \$16, which means that the remaining third (35.9 percent) received \$16 and over. Only 8.4 percent of the total earned \$28 and over, and 1.4 percent as much as \$40 and over.

Owing to the fact that the average weekly hours were practically the same in all three regions, their differences in average earnings per week reflect largely variations in average hourly earnings. The average earnings per week for all workers amounted to \$22.93 in the Northern, \$16.29 in the Upper Southern, and \$10.80 in the Lower Southern wage districts.

Furthermore, due to the fact that the average weekly hours for skilled and semiskilled were considerably higher than those of unskilled employees for each race and region, the relative difference in average earnings per week between unskilled and either skilled or semiskilled workers was much higher than the respective figure for average hourly earnings.

TABLE 9.—Percentage Distribution of Fertilizer Workers, by Weekly Earnings and by Region, During Spring Months of 1938

Weekly earnings	United States	Northern wage district	Southern wage district		
			Total	Upper Southern wage district	Lower Southern wage district
Under \$2.....	3.4	0.1	4.5	1.7	5.1
\$2 and under \$4.....	6.1	1.8	7.6	5.0	8.2
\$4 and under \$6.....	6.6	2.4	8.0	4.6	8.8
\$6 and under \$8.....	7.4	2.8	9.0	4.6	10.0
\$8 and under \$10.....	9.5	2.2	12.0	5.3	13.5
\$10 and under \$12.....	9.8	2.3	12.4	8.8	13.2
\$12 and under \$14.....	12.5	3.7	15.4	11.1	16.5
\$14 and under \$16.....	8.8	5.5	9.9	10.0	9.9
\$16 and under \$20.....	11.2	14.5	10.0	16.1	8.7
\$20 and under \$24.....	9.5	21.4	5.4	15.4	3.1
\$24 and under \$28.....	6.8	17.6	3.1	10.4	1.4
\$28 and under \$32.....	3.6	9.9	1.5	4.5	.8
\$32 and under \$36.....	2.2	7.1	.5	1.4	.3
\$36 and under \$40.....	1.2	4.0	.3	.7	.2
\$40 and under \$44.....	.6	2.1	.1	.2	.1
\$44 and under \$48.....	.3	1.1	.1	.1	.1
\$48 and under \$52.....	.2	.7	.1	.1	(1)
\$52 and over.....	.3	.8	.1	(1)	.1
Total.....	100.0	100.0	100.0	100.0	100.0

¹ Less than 1/10 of 1 percent.

UNION SCALES OF WAGES AND HOURS OF MOTORTRUCK DRIVERS, JUNE 1, 1938

THERE was an increase of 3.6 percent in the average hourly wage rate for motortruck drivers between May 15, 1937 and June 1, 1938, in 65 principal cities of the United States. The average hourly rate for union truck drivers' helpers rose 3.5 percent. Based on comparable quotations, the 1938 average hourly rate for drivers was 79.3 cents and for helpers 67.5 cents.¹ In 1937 the drivers' average rate was 76.5 cents and that of helpers, 65.2 cents.

During the year there was extensive union organization activity among truck drivers throughout the country. Union agreements were signed in many cities as well as in certain types of delivery and trucking which had not previously been organized. Although these new agreements usually provided higher wage scales than had existed before the agreements were signed, these wage rates were, on the average, not so high as the wages provided in those areas of the industry which had been organized for several years or more. The inclusion of rates from these newly organized sections of the trade, therefore, results in a lower average for the year than that obtained by a comparison of quotations received for 1937 as well as 1938. Including the wage scales for those which did not report union wage rates in 1937, the average for union drivers in 1938 was 78.1 cents per hour and for helpers, 65.9 cents.

The term "truck drivers" covers a heterogeneous group of occupations such as drivers of building and excavating trucks, coal trucks, ice trucks, general hauling and transfer trucks, delivery trucks of various and miscellaneous commodities, and express and freight trucks. In each of these classifications different types and sizes of trucks are likely to be used. Every truck-driving occupation and every size and type of truck usually has a different wage rate. Furthermore, there is a great variation between cities as to commodities handled, types of trucks, and the terminology used to describe these different occupations. For these reasons it is impossible to make an intercity classification by types. The data on all truck driving in all cities studied, therefore, are treated as one trade in this study, division being made only between drivers and helpers.

¹ This report is based upon the latest of a series of annual surveys by the Bureau of Labor Statistics covering union wage and hour scales in various trades in the principal cities of the United States. The Bureau's agents visited 72 cities in the 1938 survey. Effective union agreements providing hourly wage rates for one or more types of truck driving were reported in 65 of the cities visited.

During 1938, 1,326 wage quotations were received, covering 152,490 drivers and 26,369 helpers. Of the total quotations, 1,052 also reported wage scales in effect on May 15, 1937. There were wage rates reported in 1938 for 16,334 drivers and 2,585 helpers which were not reported in 1937.

All of the percents of change and the year-to-year comparisons in this report are based upon identical quotations which showed comparable data for both years. The averages are weighted according to the number of union members reported in 1938.

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TABLE 1.—*Distribution of Union Motortruck Drivers, by Hourly Rates, 1937 and 1938*¹

Classified hourly rates	Percentage of members with classified hourly rates			
	Drivers		Helpers	
	1938	1937	1938	1937
Average hourly rate.....	\$0. 793	\$0. 765	\$0. 675	\$0. 652
Under 30 cents.....		0. 1	0. 1	0. 2
30 and under 35 cents.....	0. 1	. 1	. 1	(²)
35 and under 40 cents.....	. 1	. 4	. 1	. 1
40 and under 45 cents.....	1. 1	1. 0	1. 4	3. 4
45 and under 50 cents.....	. 3	. 5	3. 9	3. 8
50 and under 60 cents.....	5. 0	5. 4	11. 1	23. 7
60 and under 70 cents.....	17. 5	29. 6	40. 2	29. 6
70 and under 80 cents.....	32. 5	25. 5	26. 6	22. 5
80 and under 90 cents.....	18. 7	15. 0	9. 8	10. 2
90 cents and under \$1.00.....	12. 4	10. 5	5. 0	4. 8
\$1.00 and under \$1.10.....	10. 3	10. 7	1. 6	1. 6
\$1.10 and over.....	2. 0	1. 2	. 1	. 1

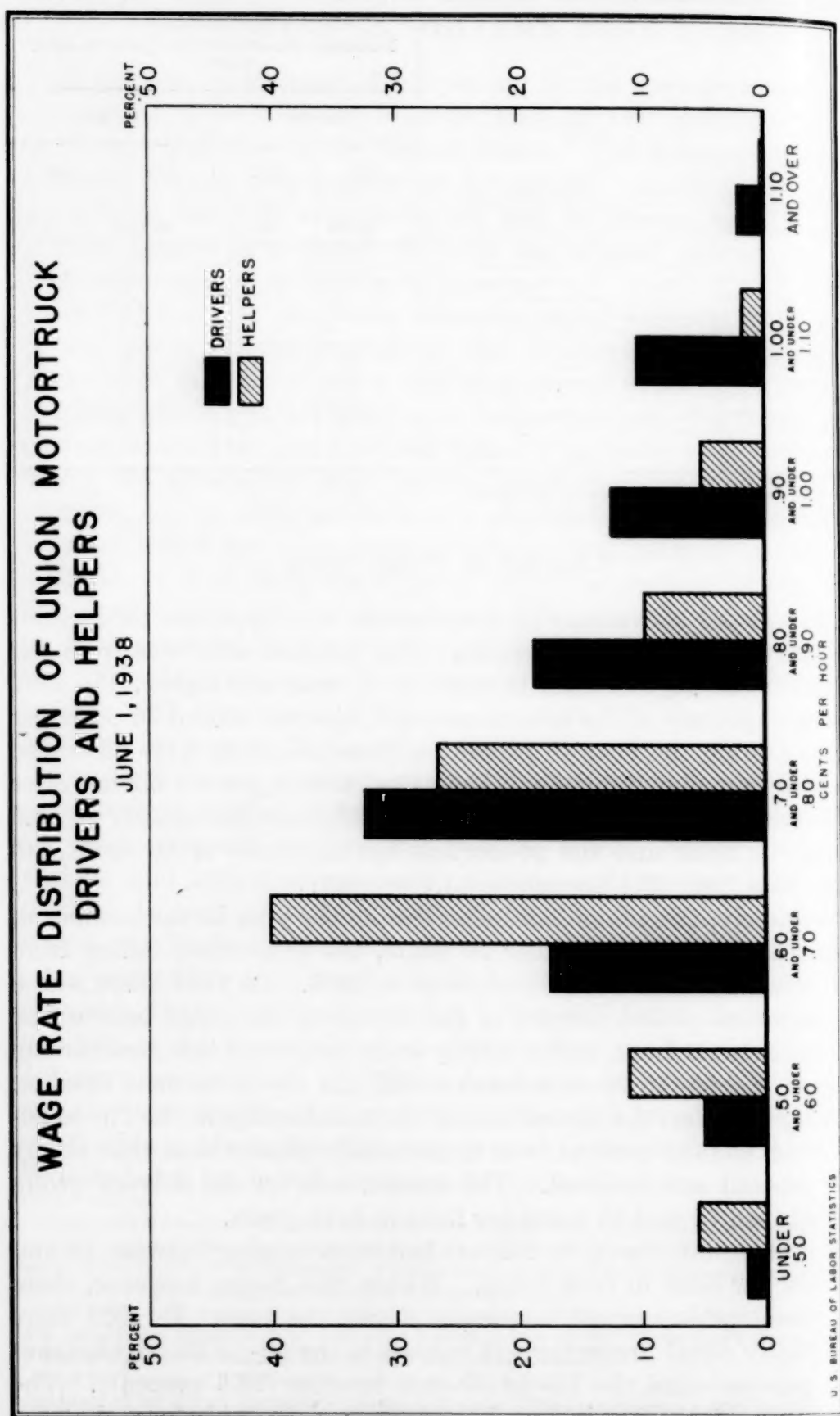
¹ Based on comparable quotations for both years.² Less than $\frac{1}{10}$ of 1 percent.

Changes in Wage Scales

The upward movement in wage scales was apparent throughout the entire range of drivers' rates. The greatest shift was from the 60- to 70-cent wage bracket to scales of 70 cents and higher. In 1937 almost 30 percent of the drivers received between 60 and 70 cents per hour. During the year 40 percent of these members were advanced to higher rate classifications. The proportion of drivers having rates between 70 and 80 cents increased from 25.5 percent in 1937 to 32.5 percent in 1938, and the proportion having scales of 80 cents and higher rose from 37.4 percent to 43.4 percent.

Conversely, there was a decrease during the year in the number of drivers having rates of under 70 cents, the proportion falling from 37.1 percent in 1937 to 24.1 percent in 1938. In 1937 there was a concentration of 55.1 percent of the drivers in the range between 60 and 80 cents per hour, with a nearly even division of this membership between the 60- to 70-cent bracket and the 70- to 80-cent bracket. In 1938, however, the percentage of the membership in the 70- to 80-cent bracket (32.5 percent) was considerably greater than that in any other 10-cent rate interval. The median rate for the drivers' group was between 70 and 80 cents per hour in both years.

Over three-fourths of the helpers had rates ranging between 50 and 80 cents per hour in both years. Within this range, however, there was considerable upward movement during the year. In 1937 there were nearly equal proportions of helpers in the 50- to 60-cent bracket (23.7 percent) and the 70- to 80-cent bracket (22.5 percent). The 60- to 70-cent bracket included the largest group of helpers, but the proportion (29.6 percent) was not outstandingly greater than those in



the two adjoining wage brackets. In 1938, although the total percentage of helpers in the 50- to 80-cent range of rates changed only slightly (from 75.8 to 77.9 percent), the relative proportions in the three 10-cent intervals changed considerably. The proportion of helpers having 50- to 60-cent rates was reduced over half, to 11.1 percent; the number having 60- to 70-cent rates increased over one-third, to 40.2 percent; and those in the 70- to 80-cent bracket increased nearly one-fifth, to 26.6 percent. There was no change during the year in the proportion of helpers having rates of less than 40 cents per hour, and only a minor change from 6.5 percent in 1937 to 6.7 percent in 1938 in the proportion having scales of 90 cents and higher.

Increases in hourly wage rates were reported in slightly more than 40 percent of the comparable quotations for drivers and in over 41 percent of the quotations for helpers. Decreases were relatively few, appearing in only six of the drivers' quotations and in two of the helpers' quotations. The proportions of the membership affected by rate changes corresponded very closely with the ratio of the quotations showing changes, the increases applying to 40.0 percent of the drivers and to 41.3 percent of the helpers. The decreases reported affected 1.0 percent of the drivers and 1.2 percent of the helpers. The 1937 scales continued unchanged for 59.0 percent of the drivers and for 57.5 percent of the helpers.

	<i>Drivers</i>	<i>Helpers</i>
Total number of rate quotations comparable with 1937.....	840	212
Number providing increases.....	341	88
Number providing decreases.....	6	2
Number with no change.....	493	122
Total number of members covered by comparable quotations.....	136, 156	23, 784
Percent affected by increases.....	40. 0	41. 3
Percent affected by decreases.....	1. 0	1. 2
Percent with no change.....	59. 0	57. 5

TABLE 2.—*Percent of Change in Union Wage Rates of Motortruck Drivers, May 15, 1937, to June 1, 1938*

Classified percentage change	Drivers				Helpers			
	Number of quotations showing—		Percentage of total members affected by—		Number of quotations showing—		Percentage of total members affected by—	
	Increase	Decrease	Increase	Decrease	Increase	Decrease	Increase	Decrease
Less than 5 percent.....	66	2	9.9	0.5	22	1	13.3	(1)
5 and under 10 percent.....	99	1	11.2	(1)	20	—	8.8	—
10 and under 15 percent.....	85	1	7.4	.2	22	—	13.7	—
15 and under 20 percent.....	43	1	8.0	.3	13	1	2.8	1.2
20 and under 25 percent.....	18	1	1.6	(1)	8	—	2.3	—
25 and under 30 percent.....	16	—	1.0	—	2	—	.2	—
30 percent and over.....	14	—	.9	—	1	—	.2	—

¹ Less than $\frac{1}{10}$ of 1 percent.

A majority of both the drivers and helpers who received increases were benefited by advances which amounted to less than 10 percent of their 1937 rates. The highest percentage increase, an advance of 60 percent, was reported for package-delivery drivers in Los Angeles, whose rate was raised from 37.5 cents per hour to 60 cents per hour during the year. Helpers on freight trucks in Charleston, W. Va., had the highest percentage increase among the helpers (41.5 percent), their rate being raised from 41.7 cents to 59 cents per hour. A substantial number of increases amounting to 20 percent or more of the 1937 rates were reported—48 for drivers and 11 for helpers. However, relatively few union members were affected by these larger increases—only 3.5 percent of the drivers and 2.7 percent of the helpers.

Overtime Rates

A majority of the reports specified time and one-half as the rate for excess hours. This scale was effective for 67.5 percent of all the drivers covered and for 63.4 percent of the helpers. Time and one-third was specified for 6 percent of the drivers and for 9.6 percent of the helpers. Other penalty rates for overtime work, most of which were specific monetary rates not in any particular ratio to the normal rates, were provided for 16.4 percent of the drivers and for 20.8 percent of the helpers.

About 14 percent of the quotations for drivers and nearly 10 percent of the quotations for helpers indicated that the agreements contained no provisions relating to overtime rates. These quotations applied to 9.8 percent of the total drivers' membership in the cities covered, and to 3.6 percent of the helpers' membership. Overtime work was reported as being prohibited in 15 drivers' quotations and in 5 helpers' quotations, covering 0.3 percent of the drivers and 2.6 percent of the helpers.

TABLE 3.—Overtime Rates Provided for Motortruck Drivers and Helpers, June 1, 1938¹

Overtime rates provided in agreements	Drivers		Helpers	
	Number of quotations	Percentage of members covered	Number of quotations	Percentage of members covered
Time and one-third.....	51	6.0	21	9.6
Time and one-half.....	729	67.5	189	63.4
Other penalty rates.....	119	16.4	20	20.8
No penalty rate provided.....	152	9.8	25	3.6
Overtime prohibited.....	15	.3	5	2.6

¹ Based on all quotations received for 1938.

Hour Scales

The relatively few increases and decreases in full-time weekly hours which occurred during the year resulted in virtually no decrease in the average scale of hours for drivers or helpers. The average for drivers was 47.8 hours per week for both years and for helpers 47.3 hours.

TABLE 4.—Distribution of Union Motortruck Drivers, by Hours Per Week, 1937 and 1938¹

Classified hours per week	Percentage of members with classified hours			
	Drivers		Helpers	
	1938	1937	1938	1937
Average hours per week.....	47.8	47.8	47.3	47.3
Less than 40 hours.....	0.4	0.4		
40 hours.....	10.9	10.5	11.7	11.8
Over 40 and under 44 hours.....	(²)	(²)		
44 hours.....	3.7	4.1	.9	.9
Over 44 and under 48 hours.....	9.1	9.5	12.5	13.3
48 hours.....	60.3	60.5	68.3	67.7
Over 48 and under 54 hours.....	6.1	4.5	.9	.6
54 hours.....	5.8	7.1	4.4	4.2
Over 54 and under 60 hours.....	1.0	.9	.2	.2
60 hours.....	2.5	2.2	1.1	1.3
Over 60 hours.....	.2	.3		

¹ Based on comparable quotations.

² Less than $\frac{1}{10}$ of 1 percent.

Slightly over 60 percent of the drivers and approximately 68 percent of the helpers were working on a basis of 48 hours per week in both 1937 and 1938. A 40-hour week was in effect for 10.9 percent of the drivers and for 11.7 percent of the helpers in 1938. None of the helpers and only 0.4 percent of the drivers had workweeks of less than 40 hours. Hour scales exceeding 48 per week were reported for about 15 percent of the drivers and for slightly over 6 percent of the helpers.

Decreases in full-time weekly hours were reported in 46 of the drivers' quotations covering 4.1 percent of the comparable membership. Increased hour scales were reported in 13 quotations applying to 1.9 percent of the drivers' membership. Ten of the helpers' quotations reported decreases in weekly hours and 5 reported increases, applying to 2.4 and 3.1 percent of the membership, respectively.

Total number of hour quotations comparable	Drivers	Helpers
with 1937.....	832	208
Number providing increases.....	13	5
Number providing decreases.....	46	10
Number with no change.....	773	193
Total number of members covered by comparable quotations.....	132,501	23,707
Percent affected by increases.....	1.9	3.1
Percent affected by decreases.....	4.1	2.4
Percent with no change.....	94.0	94.5

TABLE 5.—*Amount of Change in Union Hour Scales of Motortruck Drivers, May 15, 1937, to June 1, 1938*

Amount of change in hours per week	Number of quotations showing—		Percentage of total members affected by—		Amount of change in hours per week	Number of quotations showing—		Percentage of total members affected by—	
	Increase	Decrease	Increase	Decrease		Increase	Decrease	Increase	Decrease
<i>Drivers</i>					8 hours.....	1	11	(1)	0.6
½ hour.....	1	-----	0.1	-----	10 hours.....	1	1	0.3	(1)
1 hour.....	1	-----	.1	-----	16 hours.....	4	-----	.8	-----
2 hours.....	-----	1	-----	(1)	<i>Helpers</i>				
2½ hours.....	-----	2	-----	0.4	½ hour.....	1	-----	1.1	-----
3 hours.....	-----	13	-----	1.7	3 hours.....	-----	5	-----	.6
4 hours.....	-----	2	-----	.1	6 hours.....	3	4	1.9	1.8
5 hours.....	-----	2	-----	.2	8 hours.....	1	1	.1	(1)
6 hours.....	5	14	.6	1.1					

¹ Less than ¼ of 1 percent.

The amount of the increases in weekly hours ranged from one-half hour to 16 hours per week, the greatest being a change from 44 to 60 hours per week for building-material and dump-truck drivers in Los Angeles. The decreases ranged from 2 to 10 hours per week. Tractor operators in San Francisco reported the greatest reduction, with a change from 40 to 30 in their weekly hours.

The increases in hours most frequently reported were changes from 48 to 54 hours per week and from 44 to 60 hours per week, each of which occurred in 4 of the trucking classifications. The most frequent decreases were from 48 to 40 hours, reported in 12 instances; 48 to 45 hours, reported in 11 instances; 54 to 48 hours, reported in 10 instances; and 60 to 54 hours and 54 to 51 hours, each reported in 6 instances.

Other Provisions of Union Agreements

The larger number of union agreements specify an 8-hour day for local drivers and helpers. Comparatively few provide for a shorter workday, but 9- and 10-hour days are not uncommon. Some of the agreements covering the handling of seasonal commodities provide for longer workdays during some months than in others.

In most agreements 6 days constitute the maximum workweek, although provisions for 5- or 5½-day weeks are contained in a number of contracts. Seven-day weeks were reported only for ice-truck drivers in Houston, funeral drivers in New Orleans, taxi drivers in Oklahoma City, bread salesmen in Philadelphia, and newspaper drivers in Pittsburgh.

Only a few of the agreements, mainly those covering the hauling of milk, bakery goods, and fruits and vegetables, specify the hours of the day during which work is to be performed. In the handling of these

commodities, starting times as early as 2 or 3 a. m. are sometimes necessary.

Sunday and holiday work.—The agreements usually provide that no regular work shall be performed on Sundays or holidays. In a majority of cases, however, provisions are made for necessary work on these days at a penalty rate, usually time and a half or double time. In most cases it is required that a minimum amount of work be given to anyone called out on Sunday or holidays. This minimum ranges from 4 hours to a full day. Under some agreements a union permit must be secured for any holiday work. Work on Labor Day is prohibited under any circumstances in a number of agreements.

The holidays generally observed are New Year's, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas. Only a few agreements provide for fewer than these 6 holidays, although various other holidays are occasionally included. Straight pay for these holidays is frequently granted to regular employees or to those who have worked 3 days during the week of the holiday.

Extra-pay provisions.—The most frequent extra-pay provision relates to drivers who report at the regular starting time but find no work available. In such cases if the driver was not notified of this lack of work the day before, a minimum amount, usually from 2 hours' to a half day's pay, must be paid him.

Drivers who start the day's work are frequently guaranteed a half day's pay, or a full day's pay if their work extends past the noon hour. In a few cases a full day's pay is guaranteed for any day on which work is begun. Under some agreements these guaranties are waived when work is suspended on account of adverse weather conditions.

Drivers sent on overnight trips are usually granted an allowance to cover the expense of meals and lodging. Some agreements specify the amount to be furnished for such expenses, varying from \$1.50 to \$3.50 per day. A meal allowance is sometimes granted for trips which are unusually long but which do not involve being away from home over night.

When trucks are left for the night at points outside the city rather than in the regular garage, drivers are usually paid straight time for traveling between the city limit and their trucks.

Union status.—Union membership is usually a condition of continuing employment. Under a majority of the agreements the employers agree to hire only union members in good standing, as long as satisfactory members are available. In only a few agreements, however, are the employers bound to accept without choice the members sent by the union in response to notices of vacancies. Generally, if active members who are acceptable to the employers are not available within a reasonable time, the employers are permitted to engage any nonmember who may be willing to join the union. In some cases

these new employees must obtain permit cards from the union. In practically all instances such employees must make application for membership in the union within a specified time, ranging from 1 week to 30 days. The union in return agrees to accept into full membership any such employees who are not disqualified by their previous records. Under a relatively small number of agreements membership is withheld and nonmembers are required to be replaced by union drivers as soon as they become available. The unrestricted privilege of engaging either members or those who are willing to become members is most common in agreements covering salesman drivers whose duties involve the securing and maintenance of contacts with customers.

The check-off system of collecting union dues is not generally made a part of the truck drivers' contracts. A number of agreements, however, provide that the employers will honor signed orders from the employees for payment of dues to the union. Provisions for the appointment of a union steward at each garage, whose duties shall include the collection of dues, are fairly common.

Seniority and discharge.—One week's notice is required under a number of agreements when a driver is quitting or is to be laid off. In a few cases two weeks' notice is required. Failure to give the required notice when quitting causes the driver in some cases to forfeit a week's pay. Similar notice is required for discharge for causes other than intoxication or dishonesty, which are usually specified as grounds for summary dismissal. Other reasons for discharge are not generally specified, except that the discharge must be for good cause and must not involve discrimination because of union membership. The company generally agrees to discharge men expelled by the union, the union in turn agreeing to consider the expulsion of any driver discharged for cause.

Seniority is made the guide in lay-offs and reemployment under a number of agreements. Seniority rights usually hold through a limited lay-off period and through leave of absence for sickness or union duties, provided that the leave does not exceed from 3 to 6 months.

Vacations.—Vacations with pay are granted in nearly a fourth of these agreements, the length of vacations ranging from 1 to 2 weeks. Usually a year of service is required before a driver becomes eligible for a vacation. The acceptance of pay in lieu of a vacation is permitted only to drivers leaving the service of the employer. The period during which vacations must be taken is frequently specified. Preference in the choice of time for vacations is granted to individual drivers in accordance with seniority. In a very few cases drivers are given the right to take annual vacations of a designated length, but receive no pay while off duty.

Settlement of grievances.—A majority of the agreements provide a definite procedure for the adjustment of any disputes that may arise. These include methods of arbitration to be followed when direct settlement between the union and the employer is impossible. The arbitration decision is made binding upon both parties, and strikes or lockouts are prohibited except in the event that one party, in violation of the agreement, should refuse to abide by the arbitrator's ruling. Sympathetic strikes are quite generally disapproved and are frequently prohibited entirely. In a very few cases sympathetic strikes are stated not to be a violation of the agreement, provided other members of the drivers' union are involved. It is generally specified, however, that in case of a strike or lockout at another company, driver's refusal to pick up or deliver on the premises of the company involved will not be considered a violation of the agreement.

Learners.—A learning or probation period is provided for new employees in a number of agreements. This period varies from a few days to several months. During this period the new employee is excluded from the benefits granted under the agreement. In a few cases a lower pay scale is established for learners, but usually they may be paid any amount satisfactory to the learners and the employers. Seniority rights do not accrue until the end of the probation period.

Long-distance hauling.—Agreements covering long-distance-freight operations generally distinguished between the runs over the road between terminals and the local pick-up and delivery of freight at the terminals. The pick-up and delivery is always paid for at time rates, while driving between terminals is generally paid for on a mileage or trip basis regardless of the actual time required. The hours of work on road driving are not commonly specified except as to a weekly total or as may be established by State law or by regulations of the Interstate Commerce Commission.

Provisions for an allowance for expenses while on the road are generally included, and enforced lay-overs waiting for a load are required to be paid for at time rates. Special time rates are frequently provided for remaining with the truck to watch the load in the event of a breakdown, such "watching time" to start as soon as the driver has notified the terminal by telephone of the breakdown.

Other provisions.—The provisions regarding uniforms for drivers are rather varied, but generally when uniforms are required the company must assume the cost and, in some cases, must provide an additional allowance for maintenance. In a few cases the cost of uniforms is shared equally by the company and the worker. Less frequently, a maximum price to the employee is set in the agreement and the maximum number of uniforms he is expected to have is stipulated.

A frequent stipulation in the drivers' agreements provides that no driver shall be required to wash or grease his truck, or to make any

repairs other than may be necessary in an emergency while away from the garage.

When drivers are required to furnish cash bonds, the employers are usually required to pay interest on the amount deposited. This interest is most frequently set at 4 percent, although a few agreements specify 6 percent. If the employer demands a surety bond rather than a cash deposit, he is generally required to pay the necessary premiums. Failure to supply the required bond is recognized as just grounds for refusing to employ any union member, although some agreements provide that a driver who cannot deposit the entire amount requested may make up the difference in specified weekly installments. Under such circumstances the interest does not start until the full amount has been paid.



EARNINGS IN VARIOUS INDUSTRIES IN PUERTO RICO, 1937-38

EARNINGS of 71,288 workers employed by 1,004 industrial establishments and farms in Puerto Rico, in 1937-38, averaged 15.7 cents per hour; 62,394 of these workers (87.5 percent) received less than 25 cents per hour, and 46,175 (64.9 percent) less than 15 cents per hour—the equivalents of \$12.00 and \$7.20, respectively, for a full-time week of 48 hours. The average per hour for 49,028 adult males was 17.1 cents, and for 21,985 adult females, 12.7 cents.

In the industries reported in the following table, male workers in a cigarette factory averaged 29.5 cents per hour, but in 40 tobacco-growing undertakings received only 6.3 cents. The average hourly earnings of female workers ranged from 4.2 cents in tobacco cultivation to 38.9 cents in a cigarette factory. These data are taken from the report of the Commissioner of Puerto Rico for the year 1937-38.

Average Hourly and Weekly Earnings and Hours of Labor in Various Industries in Puerto Rico, 1937-38

Industry, and sex of workers	Number of establishments	Number of employees	Average hours per week		Average earnings per hour	Average earnings per week	
			Full time	Actually worked		Full time	Actual
Alcohol distilleries: Males.....	3	149	50.9	39.7	\$0.1417	\$7.21	\$5.62
Button factories:							
Males.....	3	438	43.8	35.1	.2087	9.15	7.33
Females.....	2	188	44.2	40.1	.1416	6.26	5.68
Cigar factories:							
Males.....	23	349	47.7	38.5	.141	6.72	5.45
Females.....	9	30	47.7	32.4	.126	6.01	4.08
Cigarette factories:							
Males.....	1	26	48.0	27.4	.2948	14.15	8.09
Females.....	1	9	48.0	9.2	.3892	18.68	3.89

Average Hourly and Weekly Earnings and Hours of Labor in Various Industries in Puerto Rico, 1937-38—Continued

Industry, and sex of workers	Number of establishments	Number of employees	Average hours per week		Average earnings per hour	Average earnings per week	
			Full time	Actually worked		Full time	Actual
Coffee cultivation:							
Males.....	20	300	47.9	34.5	\$0.0686	\$3.28	\$2.37
Females.....	6	54	48.0	32.2	.050	2.40	1.61
Coffee roasting:							
Males.....	12	121	47.8	42.6	.1662	7.94	7.08
Females.....	1	2	48.0	36.0	.125	6.00	4.50
Fruit-canning plants:							
Males.....	5	185	45.5	32.0	.1137	5.17	3.64
Females.....	4	428	47.0	32.3	.1137	5.34	3.68
Fruit-packing shops:							
Males.....	10	245	48.9	26.7	.1173	5.73	3.13
Females.....	4	19	48.0	9.1	.0625	3.00	.57
Hat factories:							
Males.....	3	146	48.0	32.8	.2405	11.54	7.90
Females.....	3	205	48.0	24.4	.1731	8.31	4.23
Needlework industry:							
Children's garments:							
Males.....	16	137	46.2	34.3	.1615	7.46	5.54
Females.....	19	1,387	46.4	28.7	.1376	6.38	3.95
Handkerchiefs and art linen:							
Males.....	50	686	46.9	33.6	.1378	6.46	4.63
Females.....	51	1,822	46.5	30.5	.1324	6.16	4.04
Men's shirts:							
Males.....	6	58	47.4	39.2	.180	8.53	7.06
Females.....	6	367	46.5	32.4	.1445	6.72	4.69
Men's suits:							
Males.....	8	234	47.7	39.4	.1526	7.28	6.01
Females.....	7	361	43.5	32.4	.1542	6.71	5.01
Pants:							
Males.....	8	29	46.9	45.1	.1702	7.98	7.68
Females.....	13	278	47.1	28.8	.1328	6.25	3.83
Women's dresses:							
Males.....	2	4	46.0	46.0	.1549	7.12	7.12
Females.....	5	105	46.6	34.4	.1315	6.13	4.52
Women's underwear:							
Males.....	17	102	47.2	35.3	.1837	8.67	6.49
Females.....	22	1,002	46.4	33.4	.1336	6.20	4.47
Sugarcane planting:							
Males.....	57	15,439	48.7	27.8	.1457	7.09	4.05
Females.....	3	16	48.0	21.5	.0989	4.75	2.13
Sugar factories:							
Males.....	40	11,928	55.9	43.9	.1849	10.33	8.13
Females.....	4	14	50.8	50.6	.1212	6.16	6.13
Sugar refineries: Males.....	4	853	56.0	40.5	.1609	9.01	6.52
Tobacco cultivation:							
Males.....	40	421	48.0	37.1	.063	3.02	2.34
Females.....	27	380	48.0	43.9	.0418	2.01	1.84
Tobacco stripping:							
Males.....	57	1,672	48.1	42.6	.1319	6.34	5.63
Females.....	57	13,617	47.7	33.0	.1255	5.99	4.14

In 1937-38 the average hourly earnings of 6,815 workers in 1,105 commercial establishments in Puerto Rico were 19.6 cents, 5,521 adult males averaging 20.9 cents per hour, and 1,260 adult females averaging 14.4 cents.

The average earnings of 1,038 nongovernmental male office workers for an average full-time week of 47.3 hours amounted to \$19.42. The average pay of 445 female office workers, excluding those in governmental service, for an average full-time week of 46.8 hours, was \$11.93. Earnings of male workers ranged from \$6.77 for messengers to \$48.14 for comptrollers and auditors, and of female workers from \$10.16 for clerks to \$33.33 for correspondents.

WAGES IN YUGOSLAVIA, DECEMBER 1935 AND 1937¹

EIGHT hours constitute both the working day and the length of a working shift in all industries and trades in Yugoslavia, except in case of seasonal work, in which the workday may be 10 hours. A maximum of 2 hours, in addition to the regular 8 hours, is permitted upon authorization by the labor inspector. Time and a half is paid for overtime.

Certain deductions from wages are made: Taxes average 3 percent of the total yearly earnings. Weekly contributions for health insurance and employment service amount, respectively, to 42 percent of 1 day's wage per week (7 percent of the weekly earnings) and 3.6 percent of 1 day's earnings. Contributions to the Chamber of Labor amount to 0.3 percent of the weekly earnings. Deductions for taxes and contributions to the Chamber of Labor are charged wholly to the workers, and contributions to health insurance and to employment service are paid half by the workers and half by the employers.

The cost of insurance against industrial accidents is borne by the employer, on the basis of the minimum wage, and according to a special scale corresponding to the degree of danger in each occupation. This scale is graduated from 1 to 100 percent of the contributions to health insurance.

The following table shows daily wages in December 1935 and December 1937 in the specified industries.

Daily Wages in Yugoslavia in December 1935 and 1937

[Average exchange rate of dinar in December 1935 and 1937=2.3 cents]

Industry and occupation	December 1935	December 1937
Mining:	<i>Dinars</i>	<i>Dinars</i>
Overseers.....	38.00- 52.00	38.00- 52.00
Powdermen.....	28.00- 33.00	28.00- 33.00
Miners.....	20.34- 28.00	20.00- 115.00
Teamsters.....	14.24- 22.00	15.00- 75.00
Professional workers.....	19.50- 37.00	18.00- 90.00
Unskilled workers.....	14.50- 22.50	10.00- 93.00
Petroleum production:		
Machinists, locksmiths, turners, distillers, refiners, carpenters.....	30.00- 96.40	30.00- 96.40
Firemen.....	24.00- 68.00	24.00- 68.00
Forestry:		
Workers on logs, sleepers, and staves.....	24.00- 50.00	24.00- 50.00
Woodmen.....	22.00- 30.00	22.00- 30.00
Unskilled workmen (loading, unloading, etc.).....	18.00- 25.00	20.00- 30.00
Lumbering:¹		
Machinists.....	24.00- 60.00	70.00- 90.00
Stokers.....	(2) 18.00- 40.00	24.00- 32.00
Workers at saws.....	18.00- 40.00	24.00- 32.00
Unskilled workers.....	16.00- 24.00	16.00- 24.00
Loading finished goods.....		8.00
Loading and unloading firewood.....		60.00- 75.00
Machinists, electricians, stokers.....		56.00- 88.00

See footnote at end of table.

¹ Based upon reports of Robert B. Macatee, American consul at Belgrade, November 12, 1938, and January 18, 1939.

Daily Wages in Yugoslavia in December 1935 and 1937—Continued

Industry and occupation	December 1935		December 1937	
	Dinars		Dinars	
Lumbering—Continued.				
Locksmiths, saw operators, planers, pressmen			48.00-	72.00
Unskilled workers				44.00
Female labor			23.00-	27.00
Sugar production: ⁵				
Higher professional and skilled workmen	28.00-	52.00	64.00-	68.00
Younger professional and skilled workers, with fewer years of experience			44.00-	56.00
Unskilled day workers	22.00-	32.00		34.00
Starch and corn sirup industry: ⁶				
Machinists				62.00
Machine operators and firemen			50.00-	53.00
Locksmiths, electricians, carpenters			40.00-	50.00
Trained workers on grinding, dextrine refining, oil pressing, and operating dehydration chambers			36.00-	40.00
Unskilled workers for yard work, loading, and unloading			30.00-	35.00
Yeast industry:				
Trained operators in cooking of molasses and in fermentation			43.00-	76.00
Helpers			36.00-	40.00
Acetic-acid industry:				
Trained operators in refining, distilling, and fermentation			44.00-	76.00
Helpers			36.00-	40.00
Milling industry: ⁷				
Millers	24.71-	54.00	32.00-	36.00
Assistants			22.00-	24.00
Watchmen			22.00-	24.00
Stokers			24.00-	26.00
Machinists			60.00-	75.00
Locksmiths			28.00-	30.00
Unskilled workers	20.00-	37.00	16.00-	20.00
Brewing industry: ⁸				
Brewers, assistants, boiler operators, etc.			36.00-	40.00
Machinists, smiths, bricklayers, chauffeurs, etc.			34.00-	35.00
Unskilled helpers				24.00
Textile industry: ⁹				
Skilled males:				
Spinners	¹⁰ 20.00-	30.00		
Weavers	¹⁰ 16.00-	24.00		¹⁰ 24.00
Skilled females:				
Spinners	¹⁰ 16.00-	24.00	¹⁰ 16.00-	20.00
Weavers	¹⁰ 16.00-	24.00		
Unskilled workers:				
Spinners	12.00-	20.00	16.00-	24.00
Weavers	16.00-	24.00		
Footwear industry:				
Modelers				48.00
Fine stitchers				40.00
Sewers				40.00
Cutters				36.00
Punchers				32.00
Finishers, female				28.00
Printing industry:				
Males:				
Class I, up to 3 years' experience			60.00-	80.00
Class II, up to 3 years' experience			92.00-	125.00
Females:				
Class I			40.00-	43.00
Class II			31.00-	35.00
Class III			23.00-	28.00
Unskilled workers	30.00-	66.00	45.00-	50.00
Metallurgical industry: ¹¹				
Locksmiths, turners, reamers, etc.			40.00-	60.00
Assemblers			¹² 45.00-	80.00
Founders			¹² 32.00-	80.00
Trained helpers			28.00-	40.00
Building trades: ¹³				
Skilled workers, with 3 years' experience:				
Masons	32.00-	80.00	40.00-	50.00
Carpenters	32.00-	72.00		
Skilled workers with more than 3 years' experience			55.00-	65.00
Molders and fine-stone masons			75.00-	85.00
Unskilled workers	12.00-	28.00	28.00-	30.00
Cement industry:				
Locksmiths, turners, plumbers, masons, electricians, harness-makers, stokers, etc.			32.00-	44.00
Unskilled workers, with experience at ovens, mills, press-oilers, breakers, etc.			33.00-	37.00
Helpers				30.00
Workers loading and unloading cement			¹⁴ 18.00-	23.00

See footnotes at end of table.

Daily Wages in Yugoslavia in December 1935 and 1937—Continued

Industry and occupation	December 1935	December 1937
	<i>Dinars</i>	<i>Dinars</i>
Brick and tile industry: ¹⁴		
Tile cutters.....		35.00- 45.00
Tile pressers and mud mixers.....		30.00- 35.00
Helpers, male and female.....		18.00- 25.00
Cutters and handlers of raw bricks.....		30.00- 45.00
Press tenders, workers pushing hand cars, etc.....		25.00- 30.00
Glass industry: ¹⁵		
Skilled operators on—		
Hollow glass.....		85.00
Ground glass.....		90.00
Pressed glass.....		88.00
Machine-made glass.....		80.00
Heavy glass, 5 to 60 liters.....		100.00- 150.00
Grinders.....		80.00
Agriculture:		
Diggers, mowers, reapers, vineyard workers.....	12.00- 30.00	14.00- 35.00
Manservants, teamsters, cowherds, shepherds.....	¹⁶ 150.00- 600.00	¹⁶ 150.00- 600.00
Winedressers.....	¹⁷ 600.00- 720.00	¹⁷ 600.00- 720.00
Railway transportation:		
Professional employees.....	23.40- 78.30	23.40- 78.30
Unskilled workers:		
Permanent.....	19.80- 40.95	19.80- 40.95
Temporary.....	¹⁸ 2.25- 5.00	¹⁸ 2.25- 5.00
Conductors and overseers.....	¹⁹ 910.00-1,900.00	¹⁹ 910.00-1,900.00
Brakemen, firemen, switchmen, yardmen, watchmen.....	¹⁶ 865.00-1,655.00	¹⁶ 865.00-1,655.00
Cleaners, night watchmen, greasers.....	¹⁶ 715.00-1,390.00	¹⁶ 715.00-1,390.00
Porters.....	(¹⁹)	(¹⁹)

¹ The sawmills usually give to the workers free lodging, light, and firewood. The workers engaged in the loading and unloading of wood logs are supplied by the enterprises with raincoats and rubber boots.

² Not specified.

³ Per ton.

⁴ Per carload of 15 and 20 tons, respectively.

⁵ First category workers have free lodging, light, 22 cubic meters of wood and 90 kilograms of sugar per year. Those of the second category have also lodging, light, 17 to 21 cubic meters of wood, and 70 kilograms of sugar. These are the average allowances; some factories give more, others less. In addition to the above, workers of the first and second categories receive usually supplementary allowances for the education of their children.

⁶ Highly skilled and essential workers get free lodging, fuel, and light.

⁷ Most mills give to their workers a certain amount of flour, usually 25 to 30 kilograms per month. Highly skilled workers usually receive free lodging, light, and fuel.

⁸ Each workman gets 1 liter of beer per day.

⁹ Some factories allow workers to purchase for themselves or their families certain quantities of cloth for clothing at less than the factory price.

¹⁰ Basic rate.

¹¹ Assemblers when working outside the factory receive a certain daily allowance and free lodging.

¹² Based on years of experience.

¹³ Number of working hours: 10.

¹⁴ Most of the brick and tile factories give free lodging in barracks.

¹⁵ Glass craftsmen and grinders as well as their assistants have lodging allowances—unmarried, 100 dinars and married from 200 to 400 dinars, depending on the members in the family, per month. Some craftsmen and assistants receive 1 to 2 cubic meters of firewood monthly.

¹⁶ Per month.

¹⁷ Per year.

¹⁸ Per hour.

¹⁹ No regular pay; earn from 1,200 to 4,000 dinars per month, according to season.

Labor Turn-Over

LABOR TURN-OVER IN MANUFACTURING ESTABLISHMENTS, DECEMBER 1938

ALTHOUGH a marked increase was shown in the number of lay-offs and total separations in December as compared with the preceding month, both rates were less than half as high as in December 1937, according to the Bureau of Labor Statistics' monthly survey of labor turn-over in manufacturing industries. The lay-off rate increased from 2.44 per 100 employees in November to 3.21 in December, and total separations from 3.14 to 3.88. The lay-off rate for December 1937 was 7.77 and the total separation rate 8.51 per 100 employees. The quit and discharge rates decreased slightly from November. Both rates were also lower than for December of 1937. The accession rate for the current month of 3.22 per 100 employees was lower than the November rate, 4.24, but considerably higher than in December 1937.

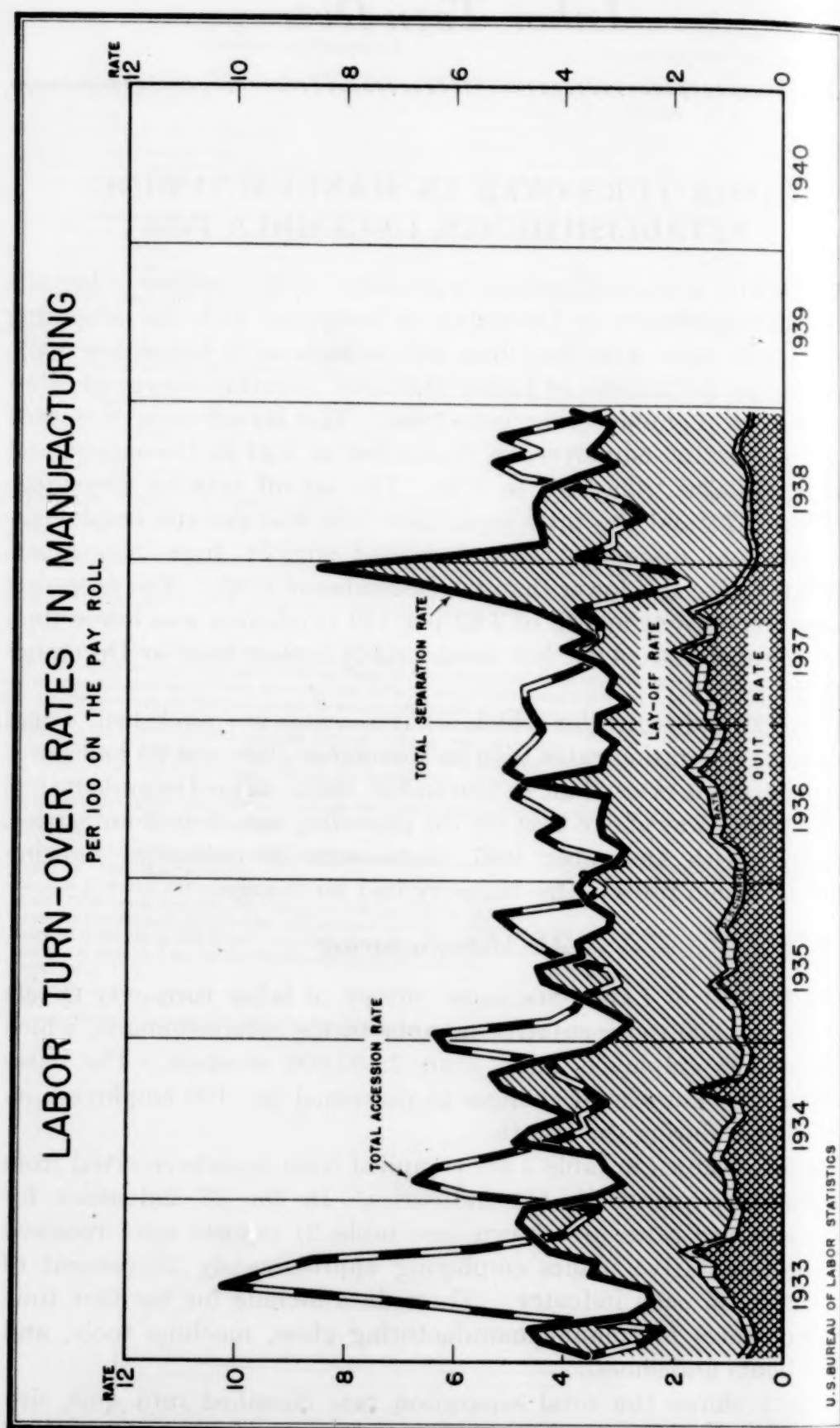
Of the 27 industries for which separate rates are published, 4 had lower total separation rates than in November 1938 and 25 had lower total separation rates than in December 1937. The December 1938 accession rate was above that for the preceding month in 9 industries. Compared with December 1937, there were 20 industries showing higher accession rates. One industry had no change.

All Manufacturing

The Bureau of Labor Statistics' survey of labor turn-over covers more than 5,000 representative manufacturing establishments, which in December employed more than 2,350,000 workers. The rates represent the number of changes in personnel per 100 employees on the pay rolls during the month.

The rates shown in table 1 are compiled from reports received from representative plants in 144 industries. In the 27 industries for which separate rates are shown (see table 2) reports were received from representative plants employing approximately 25 percent of the workers in each industry. These data include for the first time turn-over rates for plants manufacturing glass, machine tools, and rubber boots and shoes.

Table 1 shows the total separation rate classified into quit, discharge, and lay-off rates and the accession rate for each month of

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1937 and 1938 for manufacturing as a whole. The averages of the monthly rates for both years are also presented.

TABLE 1.—Monthly Labor Turn-Over Rates in Representative Factories in 144 Industries¹

Class of turnover and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
Separations:													
Quits:													
1938.....	0.52	0.49	0.61	0.59	0.62	0.61	0.59	0.65	0.82	0.78	0.60	0.58	0.62
1937.....	1.27	1.19	1.43	1.38	1.37	1.89	1.25	1.23	1.59	1.05	.72	.60	1.25
Discharges:													
1938.....	.11	.11	.11	.10	.13	.11	.09	.10	.12	.12	.10	.09	.11
1937.....	.21	.22	.24	.23	.21	.19	.21	.19	.19	.19	.16	.14	.20
Lay-offs: ²													
1938.....	5.45	3.79	3.74	3.85	3.82	3.69	3.13	2.33	2.62	2.40	2.44	3.21	3.37
1937.....	1.90	1.44	1.53	1.48	1.79	1.94	2.06	2.57	2.84	4.45	5.99	7.77	2.98
Total:													
1938.....	6.08	4.39	4.46	4.54	4.57	4.41	3.81	3.08	3.56	3.30	3.14	3.88	4.10
1937.....	3.38	2.85	3.20	3.09	3.37	4.02	3.52	3.99	4.62	5.69	6.87	8.51	4.43
Accessions:													
1938.....	3.78	3.13	3.13	2.58	2.84	3.44	4.81	5.29	4.51	5.19	4.24	3.22	3.85
1937.....	4.60	4.71	4.74	4.04	3.56	3.69	3.36	3.36	3.78	2.84	1.79	2.12	3.55

¹ The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.

² Including temporary, indeterminate, and permanent lay-offs.

Detailed turn-over rates for 27 selected manufacturing industries are shown in the accompanying table which gives the number of quits, discharges, and lay-offs, total separations, and total accessions per 100 employees in reporting firms in December and November 1938 and December 1937.

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Industries

Class of rates	Dec. 1938	Nov. 1938	Dec. 1937	Dec. 1938	Nov. 1938	Dec. 1937	Dec. 1938	Nov. 1938	Dec. 1937
	Automobiles and bodies			Automobile parts			Boots and shoes		
Quit.....	0.41	0.49	0.55	0.61	0.57	0.45	0.58	0.59	0.98
Discharge.....	.07	.08	.09	.15	.11	.14	.13	.10	.14
Lay-off.....	2.03	1.89	12.77	4.41	2.35	23.09	2.41	4.79	4.29
Total separation.....	2.51	2.46	13.41	5.17	3.03	23.68	3.12	5.48	5.41
Accession.....	3.12	8.29	2.60	4.88	9.97	1.85	6.92	2.23	8.57
	Brick, tile, and terra cotta			Cement			Cigars and cigarettes		
Quit.....	0.40	0.53	1.06	0.21	0.64	1.19	0.82	0.89	0.79
Discharge.....	.12	.10	.15	.11	.04	.15	.07	.10	.12
Lay-off.....	5.74	4.65	17.18	15.81	6.46	22.81	7.08	4.08	7.91
Total separation.....	6.26	5.28	18.39	16.13	7.14	24.15	7.97	5.07	8.82
Accession.....	3.43	4.92	1.79	1.05	.66	1.44	1.85	2.29	1.58
	Cotton manufacturing			Electrical machinery			Foundries and machine shops		
Quit.....	0.97	1.01	0.74	0.48	0.47	0.57	0.31	1.87	0.33
Discharge.....	.24	.21	.17	.03	.07	.13	.06	.05	.17
Lay-off.....	2.29	1.38	5.50	2.38	.98	9.65	1.87	1.67	6.25
Total separation.....	3.50	2.60	6.41	2.89	1.52	10.35	2.24	3.59	6.75
Accession.....	3.43	4.08	1.78	3.43	3.45	.94	3.52	4.12	.99

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Industries—Continued

Class of rates	Dec. 1938	Nov. 1938	Dec. 1937	Dec. 1938	Nov. 1938	Dec. 1937	Dec. 1938	Nov. 1938	Dec. 1937
	Furniture			Glass			Hardware		
Quit.....	0.51	0.65	0.49	0.36	0.32	0.67	0.51	0.48	0.57
Discharge.....	.14	.19	.21	.07	.12	.15	.07	.09	.15
Lay-off.....	7.29	3.56	8.85	1.74	.94	7.15	1.18	.65	9.21
Total separation.....	7.94	4.40	9.55	2.17	1.38	7.97	1.76	1.22	9.93
Accession.....	3.09	4.87	3.09	2.21	3.49	.39	2.33	3.51	.31
	Iron and steel			Knit goods			Machine tools		
Quit.....	0.32	0.43	0.53	0.86	0.67	0.62	0.41	0.38	0.42
Discharge.....	.04	.03	.05	.10	.10	.08	.02	.02	.18
Lay-off.....	1.12	.79	5.41	1.66	1.38	4.67	.89	.68	2.60
Total separation.....	1.48	1.25	5.99	2.62	2.15	5.37	1.32	1.08	3.20
Accession.....	1.62	4.42	.46	2.46	2.27	1.15	2.27	1.88	.39
	Men's clothing			Petroleum refining			Printing: Book and job		
Quit.....	0.68	0.64	0.60	0.44	0.23	0.26	0.30	0.35	0.34
Discharge.....	.04	.05	.03	.03	.01	.18	.18	.08	.19
Lay-off.....	6.73	6.47	9.07	1.91	1.97	2.67	7.49	2.61	5.56
Total separation.....	7.45	7.16	9.70	2.38	2.21	3.11	7.97	3.04	6.08
Accession.....	5.08	3.92	8.26	1.33	1.01	1.26	3.73	4.45	3.27
	Printing: Newspapers			Radios and phonographs			Rayon		
Quit.....	0.29	0.24	0.41	1.05	1.29	0.83	0.41	0.56	0.43
Discharge.....	.06	.01	.18	.14	.20	.17	.09	.11	.75
Lay-off.....	1.90	.94	3.01	3.61	1.72	20.05	1.53	1.21	13.11
Total separation.....	2.25	1.19	3.60	4.80	3.21	21.05	2.03	1.88	14.29
Accession.....	1.17	2.08	1.10	4.22	11.23	1.25	1.94	1.25	.49
	Rubber boots and shoes			Rubber tires			Sawmills		
Quit.....	0.56	0.87	0.81	0.46	0.45	0.56	0.86	0.91	2.29
Discharge.....	.01	.06	.03	.04	.06	.05	.26	.18	.14
Lay-off.....	1.29	.53	11.19	.82	.56	5.51	5.50	5.34	15.37
Total separation.....	1.86	1.46	12.03	1.32	1.07	6.12	6.62	6.43	17.71
Accession.....	1.35	2.05	8.55	2.51	3.23	.72	4.41	3.95	4.14
	Slaughtering and meat packing			Steam and hot-water heating apparatus			Woolen and worsted goods		
Quit.....	0.53	0.61	0.47	0.39	0.42	0.39	1.51	0.84	0.69
Discharge.....	.16	.17	.19	.03	.09	.07	.09	.06	.04
Lay-off.....	10.05	5.93	8.13	1.28	1.62	4.86	2.11	3.71	6.01
Total separation.....	10.74	6.71	8.79	1.70	2.13	5.32	3.71	4.61	6.65
Accession.....	7.62	11.11	8.21	1.05	.98	.99	6.67	8.63	7.17

Employment Offices

OPERATIONS OF UNITED STATES EMPLOYMENT SERVICE, JANUARY 1939

A RISE of one-third in the volume of persons registering for work with offices of the United States Employment Service during January reflected the inauguration of unemployment-compensation payments in 16 States and 2 Territories at the beginning of the year. Applications were received from 1,432,263 persons in January. Despite the increased load of registration activity, the seasonal decline in the total volume of placements was less than in any comparable period in the last 4 years, while the number of regular private placements showed a slight increase.

The volume of applications for work received at the employment offices in January was the highest since January 1938. This was due largely to the fact that the number of States inaugurating the payment of unemployment-compensation benefits during the month was exceeded only when the unemployment-compensation program first came into effect on a large scale, in January 1938. Unemployed workers must register for employment in connection with the filing of claims for benefit payments. Consequently the beginning of benefit payments in a State normally results in the receipt of a large volume of registrations from previously unregistered workers and the renewal of the applications of many previously registered workers whose applications had lapsed into inactive status.

New applications were received from 651,790 persons in January, and renewals were reported for 780,473 previously registered applicants. Men filed 1,069,405 registrations and women 362,858. These gains, coupled with a decline in the number of cancelations reported during the month, resulted in a rise of 3.1 percent in the active file to 7,442,069, reversing a 4-month downward trend.

Complete placements made by the Service numbered 199,761. This was 15.1 percent lower than in December, the smallest seasonal decline since 1935. Private placements numbered 130,154, of which slightly more than one-half were of regular duration. Although the total private placements were 21 percent lower than in December, they were nearly 40 percent higher than in January 1938. The number of regular private placements was slightly above the volume in December and

was 66.0 percent higher than the volume in January 1938. Placements in public employment numbered 69,607, only 1.7 percent below the volume of December. Total placements of men numbered 129,195 and placements of women 70,566. As usual the seasonal decline in private placements was general, decreases being reported in 42 States.

The 1,646 employment offices and 2,242 itinerant points operated by the United States Employment Service received 11,545,429 personal visits during January, 26.4 percent more than in December. A total of 128,039 field visits to employers was made during the month. In addition to complete placements, the Employment Service assisted in making 31,086 supplemental placements.

TABLE 1.—Summary of Operations of United States Employment Service, January 1939

Activity	Number	Percent of change from—		
		December ¹ 1938	January 1938	January 1937
Total applications.....	1,432,263	+33.3	-8.2	+117.3
New applications.....	651,790	+33.7	-30.8	+123.0
Renewals.....	780,473	+33.0	+26.2	+112.8
Total placements.....	199,761	-15.1	+46.0	-17.5
Private.....	130,154	-20.9	+39.9	-9.6
Public.....	69,607	-1.7	+59.0	-29.1
Active file (end of month).....	7,442,069	+3.1	+22.6	+18.5

¹ Adjusted for number of working days in month.

Placements of veterans during January showed smaller seasonal declines than for registrants as a whole. Veterans were placed in 10,395 jobs, 4,373 of which were with private employers and 6,022 in public employment. Applications were received during the month from 56,362 veterans, 19,097 of whom filed new applications and 37,265 filed renewals. At the close of the month 365,897 veterans were actively seeking work through the public Employment Service facilities.

TABLE 2.—Summary of Veterans' Activities, January 1939

Activity	Number	Percent of change from—		
		December ¹ 1938	January 1938	January 1937
Total applications.....	56,362	+31.8	-14.2	+52.7
New applications.....	19,097	+36.1	-38.6	+60.6
Renewals.....	37,265	+29.7	+7.7	+49.0
Total placements.....	10,295	-10.2	+32.8	-31.4
Private.....	4,373	-17.5	+31.8	-34.5
Public.....	6,022	-4.0	+33.6	-29.0
Active file (end of month).....	365,897	+1.2	+14.8	+5.6

¹ Adjusted for number of working days in month.

Employment Offices

703

TABLE 3.—Operations of United States Employment Service, January 1939

TOTAL

Division and State	Placements					Field visits	Applications		Active file, Jan. 31, 1939	Personal visits	Supplemental placements
	Total	Private	Percent of change from December ¹	Regular (over 1 month)	Public		Total	New			
United States..	199,761	130,154	-21	66,384	69,607	128,039	1,432,263	651,790	7,442,069	11,545,429	31,080
New England..	10,663	7,732	-12	5,185	2,931	5,998	75,988	31,966	589,329	859,866	1,535
Maine.....	1,557	1,034	+13	683	523	966	12,473	2,945	42,140	92,398	138
N. H.....	2,046	1,755	+11	1,290	291	754	6,509	1,627	32,667	39,532	138
Vermont.....	877	491	-21	287	386	249	3,227	1,015	18,596	19,415	15
Mass.....	2,357	1,604	-23	1,223	753	1,184	25,868	15,746	328,564	433,807	205
R. I.....	698	603	-32	375	95	451	9,386	4,480	55,671	102,066	36
Conn.....	3,128	2,245	-18	1,327	883	2,394	18,525	6,153	111,691	172,648	1,003
Mid. Atlantic..	24,340	19,277	-13	10,222	5,063	19,059	331,212	164,650	1,878,008	3,288,655	1,44
New York.....	14,603	11,255	-15	5,682	3,348	10,722	168,528	82,590	603,578	1,872,535	70
New Jersey.....	3,699	3,220	+16	1,407	479	1,188	58,847	39,400	266,908	531,349	91
Pa.....	6,038	4,802	-21	3,133	1,236	7,149	103,837	42,660	1,007,522	884,771	1,284
E. N. Central..	32,977	24,971	-22	12,919	8,006	23,404	276,343	118,573	1,508,823	1,638,499	3,525
Ohio.....	6,770	4,480	-23	2,181	2,290	2,395	92,478	52,119	402,134	435,413	756
Indiana.....	4,756	4,364	-23	2,528	392	4,171	37,371	16,038	211,592	367,525	730
Illinois.....	9,926	9,221	-18	4,048	705	5,741	28,125	10,626	303,097	150,097	249
Michigan.....	6,699	4,115	-29	2,450	2,584	7,067	59,988	29,840	333,029	485,490	1,222
Wisconsin.....	4,826	2,791	-21	1,712	2,035	4,030	58,381	9,950	168,971	199,974	568
W. N. Central..	17,646	11,247	-19	5,473	6,399	15,344	126,447	58,544	716,548	944,739	1,564
Minnesota.....	3,768	2,712	-17	1,445	1,056	6,120	23,076	10,301	213,097	305,398	285
Iowa.....	4,650	3,202	-20	1,399	1,448	2,838	18,708	8,187	103,269	229,186	747
Missouri.....	3,278	2,180	-12	1,217	1,098	2,601	41,960	24,025	206,659	183,674	30
N. Dakota.....	1,053	883	-48	412	170	794	5,392	1,899	31,810	30,957	85
S. Dakota.....	901	679	-2	230	222	660	4,247	1,744	37,728	22,347	45
Nebraska.....	1,828	671	-19	373	1,157	1,268	13,766	4,598	49,733	73,685	36
Kansas.....	2,168	920	-7	397	1,248	1,063	19,298	7,790	74,252	99,492	336
S. Atlantic....	31,750	14,166	-21	8,304	17,584	11,958	166,155	76,868	889,843	1,316,928	3,230
Delaware.....	722	406	-49	168	316	112	5,212	2,200	17,777	33,547	43
Maryland.....	2,570	1,523	-27	880	1,047	1,502	25,245	8,115	74,163	180,808	141
Dist. of Col..	2,746	2,458	-8	1,103	288	73	9,638	4,636	45,749	90,577	26
Virginia.....	4,617	1,874	-13	1,305	2,743	1,182	24,436	11,152	51,843	154,802	677
W. Virginia..	2,745	1,983	-27	1,389	762	1,617	20,350	6,542	151,938	178,665	521
N. Carolina..	7,152	3,454	-21	1,960	3,698	2,180	32,765	15,742	150,811	331,088	280
S. Carolina..	2,813	703	-22	468	2,110	943	10,509	6,067	130,755	131,987	114
Georgia.....	5,421	1,765	-21	1,031	3,656	4,107	32,920	18,992	155,551	119,653	90
Florida.....	2,964	0	-----	0	2,964	242	5,080	3,422	111,256	95,801	1,338
E. S. Central..	14,905	6,896	-19	4,812	8,009	6,479	78,611	43,574	491,512	595,283	3,599
Kentucky.....	1,931	774	-6	427	1,157	396	22,546	14,806	107,308	68,827	879
Tennessee.....	4,187	2,572	-15	1,751	1,615	2,789	14,387	9,064	146,698	201,540	514
Alabama.....	4,742	2,513	-25	1,883	2,229	2,245	20,651	9,504	153,831	177,028	1,835
Mississippi..	4,045	1,037	-23	751	3,008	1,049	21,027	10,200	83,675	147,888	371
W. S. Central..	36,552	25,233	-30	9,436	11,319	25,531	155,560	69,446	540,801	1,116,788	9,683
Arkansas.....	2,552	1,178	+15	549	1,374	938	13,867	7,331	80,533	82,978	553
Louisiana.....	4,259	2,992	+14	1,918	1,267	2,244	39,544	12,329	148,351	185,514	1,139
Oklahoma.....	3,213	1,466	-24	568	1,747	2,045	26,100	14,819	71,730	181,124	196
Texas.....	26,528	19,597	-36	6,401	6,931	20,304	76,049	34,967	240,187	667,172	7,795
Mountain.....	8,905	5,469	-36	2,815	3,436	6,117	68,820	22,105	229,990	396,324	2,682
Montana.....	991	477	-22	209	514	1,225	4,658	1,351	34,736	31,285	109
Idaho.....	1,035	727	-27	339	308	1,121	6,830	2,575	23,546	82,171	76
Wyoming.....	510	213	-40	99	297	198	6,138	1,853	13,167	27,183	16
Colorado.....	1,512	1,061	-7	466	451	415	25,810	8,065	64,664	111,124	22
N. Mexico.....	1,167	666	-59	491	501	1,061	5,034	1,995	39,121	31,694	12
Arizona.....	2,065	1,303	-49	849	762	709	6,460	2,870	24,680	40,485	1,969
Utah.....	768	408	-50	94	360	799	11,279	2,467	25,041	55,535	424
Nevada.....	857	614	+24	268	243	589	2,611	929	5,035	16,847	54
Pacific.....	21,661	14,974	-9	7,137	6,687	13,915	150,503	63,866	587,980	1,379,839	2,991
Washington..	1,370	1,167	+20	377	203	1,144	17,202	6,775	148,707	194,317	250
Oregon.....	3,233	1,405	+2	988	1,828	1,420	13,493	5,915	84,894	174,731	470
California.....	17,058	12,402	-12	5,772	4,656	11,351	119,808	51,176	354,379	1,010,791	2,271
Alaska.....	61	47	-34	17	14	82	894	602	2,318	7,550	47
Hawaii.....	301	142	+30	64	159	152	1,730	1,596	6,682	958	819

¹ Adjusted for number of working days in month.
² Does not include 13,545 initial claims received and 3,497 registrations of nonclaimants taken by the newly established offices of the Florida State Employment Service. These activities have not yet been cleared into the active file.

³ January 1-14 only.

TABLE 3.—Operations of United States Employment Service, January 1939—Continued

MEN

Division and State	Placements					Applications			Active file, Jan. 31, 1939
	Total	Private			Public	Total	New		
		Num-ber	Per-cent of change from De-cem-ber ¹	Regu-lar (over 1 month)			Num-ber	Per-cent of change from De-cem-ber ¹	
United States.....	129,195	60,332	-22	27,248	68,863	1,069,405	459,513	+32	5,857,329
New England.....	6,731	3,863	-5	2,556	2,868	50,981	19,012	+5	417,713
Maine.....	1,099	580	+30	308	519	9,504	1,863	-1	33,475
New Hampshire.....	1,587	1,312	+22	957	275	4,660	1,026	-14	24,591
Vermont.....	644	258	0	135	386	2,508	711	-15	14,954
Massachusetts.....	1,400	658	-24	500	742	16,838	9,330	+4	229,457
Rhode Island.....	260	189	-34	131	71	5,269	2,298	+31	36,283
Connecticut.....	1,741	866	-24	525	875	12,202	3,784	+11	78,953
Middle Atlantic.....	12,082	7,114	-7	3,861	4,968	232,615	110,779	+56	1,430,932
New York.....	7,672	4,381	-4	2,248	3,291	111,079	52,266	+16	413,164
New Jersey.....	1,297	832	+5	417	465	45,721	30,800	+550	209,611
Pennsylvania.....	3,113	1,901	-16	1,196	1,212	75,815	27,713	+31	808,157
East North Central.....	18,067	10,239	-23	4,691	7,828	209,103	86,574	+39	1,243,949
Ohio.....	3,749	1,497	-25	672	2,252	72,869	40,147	+182	416,143
Indiana.....	1,972	1,605	-20	741	367	26,567	11,073	-12	170,029
Illinois.....	4,937	4,281	-12	1,577	656	18,965	7,006	-14	248,312
Michigan.....	4,466	1,892	-39	1,202	2,574	46,573	21,786	+7	271,436
Wisconsin.....	2,943	964	-28	499	1,979	44,129	6,580	-4	138,029
West North Central.....	10,717	4,433	-27	1,712	6,284	95,804	41,164	+31	578,546
Minnesota.....	1,968	945	-32	382	1,023	15,951	6,651	-10	171,632
Iowa.....	2,671	1,259	-31	477	1,412	13,112	4,930	-16	81,580
Missouri.....	1,962	865	-18	403	1,097	31,711	17,432	+92	166,744
North Dakota.....	558	398	-45	173	160	4,095	1,359	+56	26,097
South Dakota.....	500	288	+9	63	212	3,303	1,160	+29	29,871
Nebraska.....	1,389	244	-36	96	1,145	11,209	3,283	+31	41,026
Kansas.....	1,669	434	-1	118	1,235	16,423	6,349	+30	61,596
South Atlantic.....	23,426	5,910	-24	3,294	17,516	121,177	51,342	+25	686,370
Delaware.....	384	68	-70	37	316	3,664	1,487	+105	13,754
Maryland.....	1,869	823	-10	439	1,046	18,833	5,277	+7	58,636
District of Columbia.....	895	612	-31	299	283	5,959	2,786	+25	31,486
Virginia.....	3,469	736	-21	507	2,733	18,798	8,097	+19	39,938
West Virginia.....	1,663	902	-13	698	761	17,043	4,933	+20	130,669
North Carolina.....	5,087	1,408	-28	670	3,679	20,737	9,658	+3	105,114
South Carolina.....	2,486	380	-30	231	2,106	8,273	4,345	+40	104,096
Georgia.....	4,621	981	-25	413	3,640	23,327	11,826	+68	119,453
Florida ²	2,952	0		0	2,952	4,543	2,933	+5	83,224
East South Central.....	11,630	3,650	-19	2,372	7,980	64,384	34,300	+49	398,709
Kentucky.....	1,458	301	+9	110	1,157	19,221	12,409	+133	86,369
Tennessee.....	2,846	1,234	-13	808	1,612	10,694	6,750	+31	116,384
Alabama.....	3,873	1,656	-14	1,185	2,217	16,444	7,115	+31	124,099
Mississippi.....	3,453	459	-46	269	2,994	18,025	8,026	+13	71,857
West South Central.....	25,962	14,678	-29	3,875	11,284	125,377	54,542	+13	444,108
Arkansas.....	1,937	573	+36	144	1,364	12,018	6,260	+19	69,909
Louisiana.....	2,979	1,536	+9	765	1,261	32,197	9,352	+43	120,45
Oklahoma.....	2,215	470	-32	134	1,745	21,434	12,294	-10	61,564
Texas.....	19,013	12,099	-33	2,832	6,914	59,728	26,636	+16	191,690
Mountain.....	6,123	2,752	-45	1,448	3,371	57,346	17,130	+25	195,396
Montana.....	749	247	-35	94	502	4,074	1,067	+20	29,664
Idaho.....	621	317	-30	103	304	5,856	2,052	-16	21,512
Wyoming.....	369	83	-52	31	286	5,357	1,491	+131	11,459
Colorado.....	867	430	-16	131	437	21,246	6,294	+92	52,746
New Mexico.....	883	388	-62	307	495	4,238	1,559	-10	33,087
Arizona.....	1,513	760	-61	559	753	5,134	2,150	-20	21,052
Utah.....	485	132	-51	25	353	9,162	1,754	+13	21,441
Nevada.....	636	395	+49	198	241	2,279	763	+48	4,435
Pacific.....	14,186	7,593	-6	3,410	6,593	110,253	42,707	+10	453,504
Washington.....	729	548	+17	122	181	14,308	5,106	+22	129,938
Oregon.....	2,870	1,045	+7	731	1,825	11,089	4,491	-16	69,173
California.....	10,587	6,000	-10	2,557	4,587	84,856	33,110	+13	254,393
Alaska.....	44	32	-40	12	12	822	539	+62	2,137
Hawaii.....	227	68	+11	17	159	1,543	1,424	+13	5,737

¹ Adjusted for number of working days in month.² Registration activities of newly established offices of the Florida State Employment Service not available for inclusion in this table.

TABLE 3.—Operations of United States Employment Service, January 1939—Continued

WOMEN

Division and State	Placements				Applications			Active file, Jan. 31, 1939
	Total	Private			Total	New		
		Number	Per-cent of change from Decem-ber ¹	Regular (over 1 month)		Num-ber	Per-cent of change from Decem-ber ¹	
United States.....	70,566	69,822	-20	39,136	362,858	192,277	+39	1,584,740
New England.....	3,932	3,869	-18	2,629	25,007	12,954	+14	171,616
Maine.....	458	454	-3	375	2,969	1,082	+16	8,665
New Hampshire.....	459	443	-11	233	1,849	601	+6	8,076
Vermont.....	233	233	-36	152	719	304	-24	3,642
Massachusetts.....	957	946	-22	723	9,030	6,416	+6	99,107
Rhode Island.....	438	414	-30	244	4,117	2,182	+52	19,388
Connecticut.....	1,387	1,379	-13	802	6,323	2,369	+23	32,738
Middle Atlantic.....	12,258	12,163	-16	6,361	98,597	53,871	+37	447,076
New York.....	6,931	6,874	-21	3,434	57,449	30,324	+30	190,414
New Jersey.....	2,402	2,388	+20	990	13,126	8,600	+385	57,297
Pennsylvania.....	2,925	2,901	-24	1,937	28,022	14,947	+4	199,365
East North Central.....	14,910	14,732	+31	8,228	67,240	31,999	+46	264,874
Ohio.....	3,021	2,983	-21	1,509	19,609	11,972	+178	75,991
Indiana.....	2,784	2,759	-25	1,787	10,804	4,965	+3	41,563
Illinois.....	4,989	4,940	-23	2,471	9,160	3,620	-9	54,785
Michigan.....	2,233	2,223	-17	1,248	13,415	8,072	+27	61,593
Wisconsin.....	1,883	1,827	-17	1,213	14,252	3,370	+40	30,942
West North Central.....	6,929	6,814	-13	3,761	30,643	17,380	+53	138,002
Minnesota.....	1,800	1,767	-6	1,063	7,125	3,650	+25	41,465
Iowa.....	1,979	1,943	-11	922	5,596	3,257	+19	21,689
Missouri.....	1,316	1,315	-8	814	10,249	6,593	+110	39,915
North Dakota.....	495	485	-50	239	1,297	540	+7	5,713
South Dakota.....	401	391	-8	167	944	584	+84	7,857
Nebraska.....	439	427	-3	277	2,557	1,315	+69	8,707
Kansas.....	499	486	-11	279	2,875	1,441	+48	12,656
South Atlantic.....	8,324	8,256	-19	5,010	44,978	25,526	+62	203,473
Delaware.....	338	338	-41	131	1,548	713	+183	4,023
Maryland.....	801	700	-40	441	6,412	2,838	+17	15,527
District of Columbia.....	1,851	1,846	+4	804	3,679	1,850	+18	14,263
Virginia.....	1,148	1,138	-7	798	5,638	3,055	+40	11,905
West Virginia.....	1,082	1,081	-36	691	3,307	1,609	+27	21,269
North Carolina.....	2,065	2,046	-15	1,290	12,028	6,084	+47	45,697
South Carolina.....	327	323	-10	237	2,236	1,722	+49	26,659
Georgia.....	800	784	-16	618	9,593	7,166	+242	36,098
Florida ²	12	0		0	537	489	-28	28,032
East South Central.....	3,275	3,246	-20	2,440	14,227	9,274	+49	92,803
Kentucky.....	473	473	-14	317	3,325	2,397	+134	20,939
Tennessee.....	1,341	1,338	-16	943	3,693	2,314	+23	30,314
Alabama.....	869	857	-39	698	4,207	2,389	+47	29,732
Mississippi.....	592	578	+16	482	3,002	2,174	+27	11,818
West South Central.....	10,590	10,555	-31	5,561	30,183	14,904	+26	96,693
Arkansas.....	615	605	+0	405	1,849	1,071	+23	10,624
Louisiana.....	1,462	1,456	+19	1,153	7,347	2,977	+51	27,406
Oklahoma.....	998	996	-19	434	4,666	2,525	+24	10,166
Texas.....	7,515	7,498	-39	3,569	16,321	8,331	+19	48,497
Mountain.....	2,782	2,717	-24	1,367	11,474	4,975	+36	34,594
Montana.....	242	230	-0	115	584	284	+36	5,072
Idaho.....	414	410	-25	236	974	523	+4	2,034
Wyoming.....	141	130	-28	68	781	362	+72	1,708
Colorado.....	645	631	+1	335	4,564	1,771	+136	11,918
New Mexico.....	284	278	-52	184	796	436	+2	6,034
Arizona.....	552	543	-13	290	1,326	720	+33	3,628
Utah.....	283	276	-50	69	2,117	713	-21	3,600
Nevada.....	221	219	-6	70	332	166	+43	600
Pacific.....	7,475	7,381	-11	3,727	40,250	21,159	+27	134,476
Washington.....	641	619	+24	255	2,894	1,669	-6	18,769
Oregon.....	363	360	-10	257	2,404	1,424	+13	15,721
California.....	6,471	6,402	-13	3,215	34,952	18,066	+33	99,986
Alaska.....	17	15	-12	5	72	63	+50	181
Hawaii.....	74	74	+54	47	187	172	+105	945

¹ Adjusted for number of working days in month.² Registration activities of newly established offices of the Florida State Employment Service not available for inclusion in this table.

TABLE 4.—Operations of United States Employment Service, January 1939

VETERANS

Division and State	Placements					Applications			Active file, Jan. 31, 1939
	Total	Private			Public	Total	New		
		Number	Percent of change from December ¹	Regular (over 1 month)			Number	Percent of change from December ¹	
United States.....	10,395	4,373	-18	1,650	6,022	56,362	19,097	+36	365,897
New England.....	721	231	-15	142	490	2,885	774	-12	28,265
Maine.....	58	24	-14	16	34	565	63	-28	2,084
New Hampshire.....	132	77	+51	48	55	281	44	-21	1,946
Vermont.....	48	16	+7	7	32	128	44	-6	871
Massachusetts.....	152	33	-34	26	119	942	409	-10	16,620
Rhode Island.....	19	15	-29	4	4	232	60	-3	1,874
Connecticut.....	312	66	-39	41	246	737	154	-10	4,870
Middle Atlantic.....	761	447	+26	244	314	8,807	4,140	+107	74,414
New York.....	394	219	+29	80	175	2,210	1,086	+8	17,689
New Jersey.....	149	133	+118	105	16	2,425	1,880	+1,046	12,918
Pennsylvania.....	218	95	-22	59	123	4,172	1,174	+41	43,809
East North Central.....	1,451	710	-15	280	741	11,534	3,788	+45	87,708
Ohio.....	245	122	-29	39	123	3,535	1,767	+245	30,300
Indiana.....	166	108	+13	48	58	1,635	503	-9	12,319
Illinois.....	478	321	-4	98	157	1,045	292	-23	18,646
Michigan.....	293	99	-37	69	194	1,840	843	+6	15,985
Wisconsin.....	269	60	-17	26	209	3,479	383	+1	10,458
West North Central.....	1,123	414	-27	119	709	5,861	1,943	+29	43,431
Minnesota.....	231	93	-23	20	138	898	290	-17	13,976
Iowa.....	406	172	-26	51	234	932	254	-16	6,071
Missouri.....	155	59	-18	25	96	1,808	823	+85	12,913
North Dakota.....	37	21	-36	8	16	162	52	+206	1,438
South Dakota.....	48	28	-32	4	20	216	56	+93	2,075
Nebraska.....	107	14	-53	4	93	798	176	+42	2,629
Kansas.....	139	27	-25	7	112	1,047	292	+21	4,379
South Atlantic.....	1,584	373	-13	189	1,211	5,932	1,822	+15	37,401
Delaware.....	28	3	-79	2	25	135	41	+21	935
Maryland.....	135	49	-27	23	86	1,082	208	+9	3,626
District of Columbia.....	103	54	-23	18	49	489	197	+19	3,101
Virginia.....	270	43	+10	31	227	795	191	-15	1,702
West Virginia.....	127	45	-12	45	82	838	190	+26	6,555
North Carolina.....	350	87	+16	36	263	891	308	+2	4,280
South Carolina.....	135	18	-33	5	117	372	164	+55	4,329
Georgia.....	276	74	-16	29	202	1,104	395	+54	5,534
Florida ²	160	0	-----	0	160	226	128	-12	7,339
East South Central.....	736	199	-19	111	537	3,032	1,303	+62	20,194
Kentucky.....	120	16	-54	8	104	1,069	508	+143	5,098
Tennessee.....	215	63	-37	37	152	608	308	+36	6,917
Alabama.....	261	97	+8	49	164	819	276	+45	6,094
Mississippi.....	140	23	+15	17	117	536	211	+17	2,085
West South Central.....	1,791	957	-16	227	834	6,333	2,058	+15	23,750
Arkansas.....	174	60	+88	12	114	688	268	+27	3,866
Louisiana.....	148	69	-16	42	79	1,764	315	+68	6,037
Oklahoma.....	229	73	-5	16	156	1,295	652	-5	4,142
Texas.....	1,240	755	-20	157	485	2,586	823	+16	9,705
Mountain.....	670	277	-43	105	393	3,892	892	+18	13,497
Montana.....	101	45	+15	17	56	345	82	+95	2,192
Idaho.....	72	36	-45	7	36	420	137	-3	1,460
Wyoming.....	49	11	+38	1	38	423	103	+178	868
Colorado.....	85	39	+22	12	46	1,351	255	+83	3,339
New Mexico.....	49	9	-72	9	40	185	64	-22	2,119
Arizona.....	142	64	-75	36	78	383	151	-25	1,718
Utah.....	92	15	-29	6	77	610	61	-24	1,472
Nevada.....	80	58	+76	17	22	175	39	+11	329
Pacific.....	1,552	763	-22	232	789	7,970	2,286	+13	36,662
Washington.....	79	31	-33	9	48	805	179	-3	10,860
Oregon.....	335	87	-5	57	248	694	158	-22	15,026
California.....	1,138	645	-23	166	493	6,471	1,949	+19	20,776
Alaska.....	0	0	-----	0	0	67	47	+81	182
Hawaii.....	6	2	-71	1	4	49	44	-8	359

¹ Adjusted for number of working days in month.² Registration activities of newly established offices of the Florida State Employment Service not available for inclusion in this table.

Building Operations

SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, JANUARY 1939 ¹

A GAIN of 12.9 percent over December was reported in the permit valuations of new residential construction in January. There was an increase of 11.3 percent in permit valuations for additions, alterations, and repairs over the same period. In new nonresidential construction a decrease of 3.0 percent was reported. For all classes of building construction the gain in the value of permits issued amounted to 6.1 percent.

A comparison of building-permit valuations for January 1939 with January a year ago, based on data from all reporting cities with the exception of New York City, indicated a gain of 78.2 percent in total construction, with large increases shown in each class of construction. The largest gain, 110.4 percent, was in new residential construction. The value of permits issued for new nonresidential construction increased 80.1 percent and of additions, alterations, and repairs, 26.3 percent.

Due to a new building code which became effective in New York City on January 29, 1938, there was a large influx of applications for permits during January 1938. Therefore, in studying the comparisons of the current month with the same month of 1938, the data excluding New York City are of greater significance than are the data for all cities including New York. When New York City figures are included, there was a decline of 13.0 percent in the value of permits issued for all classes of building construction, residential construction declining 27.9 percent over the year period, new nonresidential construction registering a gain of 7.8 percent, and additions, alterations, and repairs showing a small gain of 1.4 percent.

Comparison of January 1939 with December and January 1938

A summary of building construction in 2,108 identical cities in January 1939, and December and January 1938 is given in table 1.

¹ More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, January 1939," copies of which will be furnished upon request.

TABLE 1.—Summary of Building Construction for Which Permits Were Issued in 2,108 Identical Cities, January 1939

Class of construction	Number of buildings			Permit valuation		
	January 1939	Percentage change from—		January 1939	Percentage change from—	
		December 1938	January 1938		December 1938	January 1938
All construction	38,982	+1.7	+13.1	\$155,883,522	+6.1	-13.0
New residential	11,685	+5.4	+34.4	72,258,035	+12.9	-27.9
New nonresidential	6,502	-7.4	+17.4	59,358,332	-3.0	+7.8
Additions, alterations, and repairs	20,795	+2.9	+2.8	24,267,155	+11.3	+1.4

A summary of permit valuations of housekeeping dwellings and the number of families provided for in new dwellings in 2,108 identical cities, having a population of 1,000 and over, is shown in table 2 for January 1939 compared with December and January 1938.

TABLE 2.—Permit Valuation of Housekeeping Dwellings and Families Provided for in 2,108 Identical Cities, January 1939

Type of dwelling	Permit valuation of housekeeping dwellings			Number of families provided for in new dwellings		
	January 1939	Percentage change from—		January 1939	Percentage change from—	
		December 1938	January 1938		December 1938	January 1938
All types	\$70,807,777	+11.4	-29.0	21,029	+23.1	-30.8
1-family	40,644,682	-1.4	+51.9	10,663	+3.6	+43.1
2-family ¹	1,985,405	+1.5	-31.0	849	+10.8	-31.9
Multifamily ²	28,177,690	+38.4	-59.8	9,517	+58.2	-56.2

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Analysis by Size of City, January 1939

Table 3 shows the value of permits issued for building construction in January 1939 compared with December and January 1938, by size of city and by class of construction.

TABLE 3.—Permit Valuation of Building Construction in 2,108 Identical Cities, by Size of City, January 1939

Size of city	Number of cities	Total construction			New residential buildings		
		Permit valuation, January 1939	Percentage change from—		Permit valuation, January 1939	Percentage change from—	
			December 1938	January 1938		December 1938	January 1938
All reporting cities.....	2, 108	\$155, 883, 522	+6. 1	-13. 0	\$72, 258, 035	+12. 9	-27. 9
500,000 and over.....	14	53, 443, 322	+15. 5	-56. 1	31, 269, 838	+2. 5	-61. 0
100,000 and under 500,000.....	79	36, 125, 171	+36. 9	+128. 6	15, 873, 126	+64. 8	+166. 9
50,000 and under 100,000.....	95	17, 211, 324	+27. 6	+130. 2	5, 727, 690	+40. 0	+92. 3
25,000 and under 50,000.....	166	10, 701, 847	-48. 6	+22. 8	4, 185, 351	-9. 6	+89. 2
10,000 and under 25,000.....	434	16, 077, 605	-25. 2	+67. 5	6, 757, 948	-17. 0	+85. 8
5,000 and under 10,000.....	403	11, 964, 657	+17. 4	+23. 7	4, 542, 232	+21. 4	+79. 4
2,500 and under 5,000.....	493	7, 450, 406	+21. 2	+134. 5	2, 681, 491	+17. 8	+87. 8
1,000 and under 2,500.....	424	2, 909, 190	+33. 9	-8. 6	1, 220, 359	+22. 7	-3. 9

Size of city	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1930)
	Permit valuation, January 1939	Percentage change from—		Permit valuation, January 1939	Percentage change from—		
		December 1938	January 1938		December 1938	January 1938	
All reporting cities.....	\$59, 358, 332	-3. 0	+7. 8	\$24, 267, 155	+11. 3	+1. 4	60, 584, 929
500,000 and over.....	15, 519, 125	+73. 6	-49. 6	6, 654, 359	-2. 5	-37. 1	21, 449, 853
100,000 and under 500,000.....	14, 775, 240	+29. 0	+185. 8	5, 476, 805	+3. 2	+16. 8	15, 017, 880
50,000 and under 100,000.....	8, 253, 994	+12. 8	+365. 1	3, 229, 640	+55. 1	+18. 6	6, 338, 597
25,000 and under 50,000.....	3, 827, 046	-71. 5	-10. 9	2, 689, 450	-3. 0	+21. 7	5, 837, 174
10,000 and under 25,000.....	5, 606, 795	-47. 3	+35. 6	3, 712, 862	+37. 0	+103. 6	6, 671, 555
5,000 and under 10,000.....	6, 286, 399	+20. 9	+4. 9	1, 136, 026	-9. 4	-1. 2	2, 837, 680
2,500 and under 5,000.....	3, 789, 498	+14. 4	+202. 4	979, 417	+74. 9	+97. 3	1, 754, 213
1,000 and under 2,500.....	1, 300, 235	+46. 9	-21. 2	388, 596	+32. 6	+47. 9	677, 977

The permit valuation of housekeeping dwellings in the 2,108 identical cities reporting for December 1938 and January 1939, together with the number of family-dwelling units provided in new dwellings, by size of city, is given in table 4.

TABLE 4.—Permit Valuation of Housekeeping Dwellings and Families Provided for in 2,108 Identical Cities, by Size of City, December 1938 and January 1939

Size of city	Permit valuation of house-keeping dwellings			Number of families provided for in—							
	January 1939	December 1938	Per-centage change	All types of dwell-ings		1-family dwellings		2-family dwellings ¹		Multi-family ²	
				Janu-ary 1939	De-cem-ber 1938	Janu-ary 1939	De-cem-ber 1938	Janu-ary 1939	De-cem-ber 1938	Janu-ary 1939	De-cem-ber 1938
All reporting cities.....	\$70,807,777	\$63,540,373	+11.4	21,029	17,077	10,663	10,295	849	766	9,517	6,016
500,000 and over.....	31,267,238	30,296,815	+3.2	8,739	8,082	2,859	2,848	186	244	5,694	4,990
100,000 and under 500,000.....	15,326,126	9,631,851	+59.1	5,029	2,628	2,297	2,026	222	153	2,510	449
50,000 and under 100,000.....	5,529,355	3,986,338	+38.7	1,669	1,077	925	930	99	90	645	57
25,000 and under 50,000.....	4,148,266	4,557,987	-9.0	1,256	1,243	1,047	1,028	97	76	112	139
10,000 and under 25,000.....	6,671,710	8,127,846	-17.9	1,985	2,075	1,640	1,677	150	86	195	312
5,000 and under 10,000.....	4,524,232	3,735,178	+21.1	1,379	1,050	992	935	52	71	335	44
2,500 and under 5,000.....	2,120,991	2,210,057	-4.0	670	657	616	595	31	41	23	21
1,000 and under 2,500.....	1,219,859	994,301	+22.7	302	265	287	256	12	5	3	4

¹ Includes 1- and 2-family dwellings with stores.² Includes multifamily dwellings with stores.

The information on building permits issued during January 1939 and December and January 1938 is based on reports received by the Bureau of Labor Statistics from 2,108 identical cities having a population of 1,000 and over.

The information is collected by the Bureau of Labor Statistics from local building officials, except in the States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. The permit valuations shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. The data collected by the Bureau of Labor Statistics show, in addition to private and municipal construction, the value of buildings for which contracts were awarded by the Federal and State Governments in the cities included in the report. For January 1939 the value of these buildings amounted to \$24,977,000, for December 1938 to \$14,029,000, and for January 1938 to \$2,118,000.

Construction from Public Funds

The value of contracts awarded and force-account work started during January 1939 and December and January 1938 on construction projects financed wholly or partially from various Federal funds is shown in table 5.

TABLE 5.—*Value of Contracts Awarded and Force-Account Work Started on Projects Financed From Federal Funds, January 1939, December 1938, and January 1938*¹

Federal agency	Contracts awarded and force-account work started—		
	January 1939	December 1938 ²	January 1938 ²
Total.....	\$124,055,934	\$510,503,381	\$83,755,897
Public Works Administration:			
Federal.....	1,690,604	24,225,382	341,470
Non-Federal:			
NIRA.....	133,478	1,869,612	2,026,947
ERAA.....	1,740,761	3,960,851	35,576,151
PWAA.....	18,294,955	201,251,232	.....
Federal projects under The Works Program.....	1,198,801	9,386,556	7,423,431
Regular Federal appropriations.....	99,275,421	260,306,086	38,387,898
U. S. Housing Authority.....	1,721,914	9,503,662	.....

¹ Preliminary, subject to revision.² Revised.

The value of public-building and highway construction awards financed wholly from appropriations from State funds, as reported by the various State governments for January 1939 and December and January 1938 is shown in table 6.

TABLE 6.—*Value of Public-Building and Highway-Construction Awards Financed Wholly From State Funds*

Type of project	Value of contracts		
	January 1939	December 1938	January 1938
Public buildings.....	\$246,322	\$205,283	\$1,885,350
Highway construction.....	7,038,663	4,051,786	2,870,821

Trend of Employment and Pay Rolls

SUMMARY OF REPORTS FOR JANUARY 1939

Total Nonagricultural Employment

SEASONAL employment declines in retail stores, factories, and construction accounted primarily for the decrease of approximately 880,000 in the number of workers engaged in nonagricultural industries in January as compared with December. This decline was only slightly larger than that which took place from December 1936 to January 1937, and was much smaller than the unusually sharp drop from December 1937 to January 1938. Compared with January of last year, there was a decrease of 100,000 workers. These figures do not include employees on Works Progress Administration and National Youth Administration projects, enrollees in the Civilian Conservation Corps, nor certain temporary workers who are hired only during peaks of activity in some industries.

Emergency employment declined approximately 81,000 in January. This decline resulted from a reduction of nearly 92,000 in projects operated by the WPA, partly offset by increases in the number of CCC enrollees and those on NYA work projects.

Industrial and Business Employment

There was a decrease of 1.9 percent in factory employment, indicating the release of approximately 130,000 wage earners since December. Corresponding pay rolls fell 3.8 percent, representing a loss of \$6,300,000 in weekly wages. These decreases were of seasonal proportions. The index of factory employment for January (89.5 percent of the 1923-25 average) was 1.9 percent above the level of January 1938, when a sharp reduction in industrial activity was under way. The index of factory pay rolls (83.2 percent of the 1923-25 average) was 10.9 percent higher than a year ago.

Gains in employment were reported by 19 and increases in pay rolls by 16 of the 87 manufacturing industries surveyed monthly by the Bureau of Labor Statistics. For the durable-goods group there was a 1.8 percent decrease in employment and a 4.9 percent recession in pay

rolls. For the nondurable-goods industries there was a somewhat greater than seasonal decline of 1.8 percent in employment and a 2.7 percent drop in pay rolls. The industries in which substantial numbers of workers were laid off included beet sugar (11,900), sawmills (8,600), knit goods (8,600), confectionery (8,300), cigars and cigarettes (8,100), furniture (6,100), baking (5,600), men's furnishings (5,200), newspapers (4,500), and stoves (4,400). The following industries showed declines ranging from 2,400 to 3,600 workers: Radios and phonographs, automobiles, cement, meat packing, paper boxes, and electrical machinery. Shoe factories added 10,800 workers to their pay rolls, millinery firms took on 3,000 wage earners, factories manufacturing agricultural implements added 2,600 workers and fertilizer plants rehired 2,200 men.

In retail trade, there was a post-holiday decline in employment of 16.2 percent or well over half a million workers. The January 1939 employment index at 82.2 percent of the 1929 average was 2.2 percent below the level of a year ago. The December-January decline, which was slightly greater than seasonal, reflected the lay-off of the unusually large extra force taken on for the holiday trade. Employment in the general merchandising group decreased 37.0 percent but was only 0.8 percent below the level of January of last year. Apparel, jewelry, furniture, hardware, and cigar stores reported large employment losses. The other retail groups covered showed reductions of less than 5 percent, with the exception of dealers in wood, coal, and ice and in farm supplies, who increased the number of their employees by 4.4 and 0.3 percent, respectively.

Wholesale trade as a group reduced employment seasonally by 2.1 percent. The principal employment reductions were in firms selling food products, groceries, machinery, dry goods and apparel, farm products, and automobiles, equipment and parts. The only groups reporting increased employment were those dealing in farm supplies; forest products, except finished lumber; and metals and minerals.

Anthracite mines reduced their working forces 2.5 percent and bituminous-coal mines 0.7 percent. Pay rolls in the coal-mining industries showed more pronounced declines than employment, reflecting reduced production during the first half of January. Employment in quarries declined less than seasonally, by 7.0 percent, and showed a gain over January 1938 of 0.7 percent. Oil wells decreased their operating forces by 1.2 percent, and metal mines by 1.5 percent. Power and light companies reported about the usual January employment decline (1.6 percent), telephone and telegraph firms reported 0.2 percent fewer workers, and electric railroads reported an 0.3 percent employment cut. A seasonal loss of 3.8 percent occurred in dyeing and cleaning plants, and there were slight reductions in

laundries and hotels. Personnel in brokerage and insurance offices was increased slightly, by 0.1 and 0.6 percent, respectively. The gain in insurance companies raised the employment level 1.1 percent above the corresponding month of 1938.

In private building construction, the decrease of 11.5 percent in employment was, with the exception of January 1937, the smallest January reduction reported since 1933. All parts of the country reported reduced employment in construction, the smallest losses occurring in the Pacific Coast and East and West South Central States, while the largest declines were shown in the New England, the East and West North Central, and the Mountain States. The figures are based on reports which were supplied by 14,603 contractors employing 103,978 workers in January. They do not cover public construction projects financed by the Public Works Administration, Reconstruction Finance Corporation, or Works Progress Administration, or by regular appropriations of the Federal, State, or local Governments.

A preliminary report of the Interstate Commerce Commission indicated a decrease between December and January of 1.4 percent, or 13,912 persons in the number employed by class I railroads. The total number reported for January was 929,770. Corresponding pay-roll figures for January were not available when this report was prepared. For December they amounted to \$150,372,130 as against 149,011,526 for November, a gain of 0.9 percent.

Hours and earnings.—The average hours worked per week by wage earners in manufacturing industries were 36.3 in January, a decrease of 2.2 percent since December. The corresponding average hourly earnings were 65.1 cents, an increase of 0.2 percent as compared with the preceding month. Average weekly earnings decreased 1.9 percent to \$23.81.

Of the 14 nonmanufacturing industries for which man-hour data are available, 3 showed increases in average hours worked per week and 12 showed gains in average hourly earnings. Average weekly earnings were higher for 5 of the 16 nonmanufacturing industries surveyed.

Employment and pay-roll indexes and average weekly earnings in January 1939 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads, with percentage changes over the month and year intervals are presented in table 1.

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TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, January 1939 (Preliminary Figures)*

Industry	Employment			Pay roll			Average weekly earnings		
	Index, January 1939	Percentage change from—		Index, January 1939	Percentage change from—		Average in January 1939	Percentage change from—	
		December 1938	January 1938		December 1938	January 1938		December 1938	January 1938
All manufacturing industries combined ¹	(1923-25 = 100) 89.5	-1.9	+1.9	(1923-25 = 100) 83.2	-3.8	+10.9	\$23.81	-1.9	+8.9
Class I steam railroads ²	52.1	-1.4	-3.1	(³)	(³)	(³)	(³)	(³)	(³)
Coal mining:	(1929 = 100)			(1929 = 100)					
Anthracite ⁴	50.0	-2.5	-16.0	38.0	-10.6	-18.4	24.74	-8.3	-2.8
Bituminous ⁴	88.7	-7	-8.5	78.1	-3.5	+10.9	23.27	-2.8	+21.2
Metalliferous mining	61.4	-1.5	-8.9	55.3	+2.2	-6.4	28.27	+3.8	+2.8
Quarrying and nonmetallic mining	38.5	-7.0	+7	30.3	-9.8	+9.4	19.76	-3.0	+8.6
Crude-petroleum producing	67.0	-1.2	-11.0	61.0	-2.3	-10.4	33.08	-1.1	+6
Public utilities:									
Telephone and telegraph	74.1	-2	-4.8	92.0	-5	-1.8	\$30.89	-3	+3.1
Electric light and power and manufactured gas	90.0	-1.6	-4.1	95.8	-2.5	-3.1	\$33.52	-9	+1.0
Electric-railroad and motor-bus operation and maintenance	69.2	-3	-4.2	71.2	+2.1	+8	\$32.20	+2.4	+5.2
Trade:									
Wholesale	88.1	-2.1	-3.2	75.5	-3	+6	\$29.62	+1.9	+3.4
Retail	82.2	-16.2	-2.2	69.7	-12.0	-6	\$21.71	+5.0	+1.6
General merchandising	90.7	-37.0	-8	84.0	-31.6	-7	\$18.38	+8.6	+1
Other than general merchandising	80.0	-7.0	-2.6	66.7	-5.0	-7	\$24.46	+2.2	+1.9
Hotels (year-round) ^{4,7}	91.8	-2	-2.7	80.2	-1.1	-1.6	\$15.01	-9	+1.1
Laundries ⁴	93.3	-1	-3.6	79.6	-6	-7	17.43	-4	+3.0
Dyeing and cleaning ⁴	94.2	-3.8	-2.6	65.8	-3.7	+4	19.15	+1	+3.1
Brokerage	(³)	+1	-8.0	(³)	-6	-10.1	\$36.44	-7	-2.3
Insurance	(³)	+6	+1.1	(³)	+4	+4	\$34.99	-2	-7
Building construction	(³)	-11.5	-12.9	(³)	-14.0	-10.6	28.18	-2.7	+2.3

¹ Revised indexes—Adjusted to 1935 Census of Manufactures. Indexes for earlier months and years given in table 3 of the November 1938 issue of the Monthly Labor Review.

² Preliminary; Source: Interstate Commerce Commission.

³ Not available.

⁴ Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, Employment and Pay Rolls.

⁵ Average weekly earnings not strictly comparable with figures published in issues of the Monthly Labor Review dated earlier than April 1938 (except for the January figures appearing in the March issue), as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁶ Less than 1/10 of 1 percent.

⁷ Cash payments only; the additional value of board, room, and tips cannot be computed.

Public Employment

Employment on projects financed by the Public Works Administration continued to increase with the gain in the number of projects under construction which were financed from funds provided by the Public Works Administration Appropriation Act of 1938. There were 217,000 employees for the month ending January 15, 1939, on all Public Works Administration projects, a gain of 23,000 over the number working in December 1938 and more than double the number at work a year ago. Pay rolls for January 1939 were \$17,079,000.

During the month ending January 15 approximately 2,800 men were working on projects of the United States Housing Authority, and pay rolls amounted to \$320,000. These figures cover new construction and demolition and pertain only to the projects started under the United States Housing Authority; those formerly under the Public Works Administration are shown under PWA building construction projects in this report.

A seasonal decrease of 33,000 in employment occurred on construction projects financed from regular Federal appropriations. For the month ending January 15, 182,000 men were at work. Decreases in employment were reported for all types of projects with the following exceptions: Rural Electrification Administration projects, ship construction, and water and sewerage projects. Pay rolls on construction projects financed from regular Federal appropriations in January were \$18,704,000.

Slightly more than 2,500 men were working on construction projects financed by the Reconstruction Finance Corporation during the month ending January 15. Pay-roll disbursements for the period totaled \$290,000.

There was a further curtailment of work-relief employment on projects operated by the Works Progress Administration in January when about 92,000 workers were laid off, reducing the number working to 2,895,000. As compared with last January, however, nearly 995,000 more persons were at work. Pay rolls for January 1939 amounting to \$155,733,000 were \$11,271,000 less than in December 1938, and \$62,395,000 more than the pay rolls for January a year ago. For the month ending January 15, the number of persons working on Federal projects under The Works Program declined 3,000 and pay rolls dropped \$405,000. A gain of 1,000 in employment was reported on work projects of the National Youth Administration. Data on employment and pay rolls for Student Aid in January will not be available until next month.

As the result of the beginning of an enlistment period there were 330,000 employees in camps of the Civilian Conservation Corps in January, an increase of 9,000 over the number for December. Of the total number employed 294,000 were enrollees, 5,000 reserve officers, 300 nurses, 1,600 educational advisers, and 29,000 supervisory and technical employees. For all groups of workers pay-roll disbursements in January totaled \$14,709,000.

In the regular services of the Federal Government decreases in employment were reported in all services with the exception of the legislative. Of the 864,000 employees in the executive service in January 120,000 were working in the District of Columbia, and

744,000 outside the District. Force-account employees (employees who are on the Federal pay roll and are engaged on construction projects) were 10 percent of the total number of employees in the executive service. Increases in employment occurred in the number of force-account employees for the Panama Canal and in the administrative offices of the Public Works Administration. The following departments were among those agencies reporting decreased employment: Post Office and War.

The effect of seasonal influences on employment on construction work was evident on State-financed road projects. During the month ending January 15, 153,000 men were working on these road projects, a decrease of 31,000 compared with the preceding period. Of the total number at work 18,000 were engaged on new road construction and 135,000 on maintenance. Pay rolls for both types of road work amounted to \$10,525,000.

A summary of Federal employment and pay-roll data for December 1938 and January 1939 is given in table 2.

TABLE 2.—Summary of Federal Employment and Pay Rolls, January 1939 (Preliminary Figures ¹)

Class	Employment		Per-centage change	Pay rolls		Per-centage change
	January 1939	December 1938		January 1939	December 1938	
Federal services:						
Executive ²	863, 911	³ 918, 861	-6.0	\$131, 382, 390	³ \$142, 064, 975	-7.5
Judicial.....	2, 228	2, 271	-1.9	547, 687	554, 388	-1.2
Legislative.....	5, 234	5, 145	+1.7	1, 209, 738	1, 197, 211	+1.0
Military.....	339, 680	340, 891	-.4	26, 674, 833	26, 935, 537	-1.0
Construction projects:						
Financed by PWA ⁴	217, 266	194, 677	+11.6	17, 079, 092	16, 169, 889	+5.6
USHA low-cost housing.....	2, 774	2, 301	+20.6	319, 784	292, 583	+9.3
Financed by RFC ⁵	2, 546	2, 892	-12.0	290, 403	308, 347	-5.8
Financed by regular Federal ap-propriations.....	181, 976	214, 844	-15.3	18, 704, 411	20, 190, 980	-7.4
Federal projects under The Works Program.....	121, 095	124, 074	-2.4	5, 509, 841	5, 914, 821	-6.8
Projects operated by WPA.....	2, 895, 214	2, 986, 931	-3.1	155, 733, 123	³ 167, 004, 505	-6.7
National Youth Administration:						
Work projects.....	238, 862	237, 399	+6	4, 376, 868	4, 328, 281	+1.1
Student Aid.....	(⁶)	368, 921	-----	(⁶)	2, 395, 855	-----
Civilian Conservation Corps.....	330, 144	320, 975	+2.9	14, 709, 313	14, 449, 956	+1.8

¹ Includes data on projects financed wholly or partially from Federal funds.

² Includes force-account and supervisory and technical employees shown under other classifications to the extent of 114,673 employees and pay-roll disbursements of \$13,943,027 for January 1939 and 124,937 employees and pay-roll disbursements of \$14,670,121 for December 1938.

³ Revised.

⁴ Data covering PWA projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under The Works Program. Includes 36,993 wage earners and \$3,325,884 pay roll for January 1939; 46,049 wage earners and \$4,106,952 pay roll for December 1938, covering Public Works Administration projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 170,942 wage earners and \$12,626,438 pay roll for January 1939; 136,966 wage earners and \$10,747,455 pay roll for December 1938, covering Public Works Administration projects financed from funds provided by the Public Works Administration Appropriation Act of 1938.

⁵ Includes 256 employees and pay-roll disbursements of \$18,321 for January 1939; 241 employees and pay-roll disbursements of \$19,499 for December 1938 on projects financed by the RFC Mortgage Co.

⁶ January data not available.

DETAILED REPORTS FOR DECEMBER 1938

A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for the month of December, insofar as industrial and business employment is concerned, are reproduced in this section of the Monthly Labor Review.

Industrial and Business Employment

Monthly reports on employment and pay rolls are available for the following groups: 87 manufacturing industries; 16 nonmanufacturing industries, including private building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics, and in virtually all industries the samples are large enough to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

EMPLOYMENT, PAY ROLLS, HOURS, AND EARNINGS

The indexes for the manufacturing industries have been adjusted to the 1935 Census of Manufactures and are not comparable to those published in the July 1938 and earlier issues of the pamphlet. Comparable indexes for earlier months and years are available on request. Electric- and steam-railroad repair shops have been excluded from the new series in keeping with the reclassification for the 1937 Census of Manufactures.

The average hours worked per week, average hourly earnings, and average weekly earnings for all manufacturing industries combined now relate to 87 industries, instead of 89 as heretofore, because of the exclusion of electric- and steam-railroad repair shops. This exclusion also affects the averages for the durable-goods group because these industries were classified in that group. The average hours and hourly earnings for the 87 manufacturing industries combined, and for the manufacturing groups, are weighted on the basis of estimated employment for the separate industries. As these estimates have been affected by the revision of the indexes, it follows that the weighted averages for November and December differ from the averages that would result if the former estimates of employment were used as weights. Revised averages for earlier months will be computed and made available in the near future.

The indexes and averages for the iron and steel group and the non-ferrous metal products group have been affected by the transfer of the stamped and enameled ware industry from the latter group to the former. The indexes, hours, and hourly earnings for the knit-goods industry are now weighted on the basis of four subdivisions (hosiery, knitted outerwear, knitted underwear, and knitted cloth) for which separate figures are now given. Tractor manufacturing establishments have been transferred from the engine, turbine, water wheel, and windmill industry to the agricultural implement industry, thereby affecting the figures for both industries.

The revised series of employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for October, November, and December 1938, where available, are presented in table 1. The October and November figures, where given, may differ in some instances from those previously published, not only because of the foregoing, but also because of revisions necessitated by the inclusion of late reports and other causes.

The weekly average earnings shown in table 1 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As all reporting establishments do not supply man-hour data, average hours worked per week and average hourly earnings are necessarily based on data supplied by a smaller number of reporting firms. The size and composition of the reporting sample varies slightly from month to month and therefore the average hours per week, average hourly earnings, and average weekly earnings shown are not strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movements of earnings and hours over the period shown. The changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from December 1937 are computed from chain indexes based on the month-to-month percentage changes.

TABLE 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100, and are adjusted to 1935 Census of Manufactures. Not comparable to indexes published in pamphlets prior to August 1938. Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938
All manufacturing.....	91.2	90.5	89.5	86.6	84.1	83.8	\$24.34	\$23.82	\$23.95	37.1	36.5	37.4	Cents 64.8	Cents 64.5	Cents 63.7
Durable goods.....	83.1	82.1	79.0	80.4	78.3	75.2	27.35	27.11	26.95	36.8	36.5	37.4	72.6	72.4	71.0
Nondurable goods.....	98.8	98.4	99.4	93.5	92.6	93.4	21.52	20.85	21.35	37.4	36.4	37.4	58.4	59.0	57.9
Durable goods															
Iron and steel and their products, not including machinery.....	87.4	86.5	83.9	80.8	79.1	74.9	26.90	26.64	25.94	35.6	35.1	34.9	75.7	75.7	75.3
Blast furnaces, steel works, and rolling mills.....	91.1	89.8	86.1	83.2	81.9	73.9	28.49	28.48	26.79	33.8	33.8	31.9	84.2	84.1	83.9
Bolts, nuts, washers, and rivets.....	91.6	90.0	84.9	94.4	90.6	81.0	26.41	25.69	24.42	38.0	37.1	35.0	69.7	69.5	69.9
Cast-iron pipe.....	66.1	65.7	65.4	55.7	54.5	53.8	20.01	19.71	19.54	34.0	33.9	34.1	58.4	58.0	56.9
Cutlery (not including silver and plated cutlery) and edge tools.....	82.9	82.6	80.2	78.6	75.5	73.6	23.93	23.11	23.22	39.8	39.0	39.3	60.7	60.2	59.7
Forgings, iron and steel.....	49.6	48.0	45.6	49.4	44.4	41.9	29.25	27.18	26.94	38.4	36.0	36.3	76.2	74.6	74.3
Hardware.....	86.3	84.4	79.5	90.1	93.2	86.3	26.31	26.79	26.32	38.0	39.0	38.8	68.9	68.9	68.0
Plumbers' supplies.....	72.6	73.0	73.1	60.4	54.9	62.0	23.55	21.34	24.14	35.7	32.0	36.1	66.1	66.6	66.7
Stamped and enameled ware.....	134.3	133.6	128.7	136.0	133.5	133.3	24.33	24.03	24.88	38.5	38.1	39.7	62.9	63.2	62.7
Steam and hot-water heating apparatus and steam fittings.....	67.9	69.1	71.3	56.4	53.3	59.0	25.05	23.27	24.98	35.9	33.9	36.3	69.9	68.9	69.0
Stoves.....	74.7	78.9	83.1	61.4	62.7	75.7	24.30	23.55	26.98	36.9	35.5	41.0	67.2	66.7	66.2
Structural and ornamental metal work.....	61.9	60.7	61.1	53.2	50.1	50.5	27.18	26.07	26.12	37.4	36.0	36.3	72.7	72.5	72.0
Tin cans and other tinware.....	84.1	84.6	86.2	87.9	87.5	89.2	22.76	22.50	22.50	37.7	37.3	37.3	60.8	60.7	60.6
Tools (not including edge tools, machine tools, files, and saws).....	83.9	80.9	77.0	82.0	75.8	71.9	24.19	23.24	23.11	39.6	38.0	38.2	61.2	61.2	60.8
Wirework.....	171.6	164.6	146.5	185.9	180.2	156.1	26.16	26.39	25.65	38.6	38.8	37.9	67.8	68.1	68.0
Machinery, not including transportation equipment.....	91.8	89.5	87.2	89.2	83.9	81.9	26.93	26.04	26.07	37.4	36.2	36.3	72.1	72.0	71.7
Agricultural implements (including tractors).....	105.0	96.6	93.7	113.5	95.0	92.4	29.76	27.08	27.11	37.3	34.3	35.2	80.2	79.4	77.7
Cash registers, adding machines, and calculating machines.....	134.6	135.4	136.1	118.8	119.7	119.7	28.51	28.57	28.43	35.1	35.0	34.9	82.1	82.3	82.2
Electrical machinery, apparatus, and supplies.....	83.7	83.2	80.7	82.4	80.4	78.0	27.08	26.69	26.71	37.0	36.7	36.5	73.2	73.0	73.2
Engines, turbines, water wheels, and windmills.....	85.3	83.5	83.4	98.0	91.6	90.4	29.73	28.35	28.01	37.7	36.2	35.8	79.3	78.6	78.5
Foundry and machine-shop products.....	81.7	78.9	77.5	75.9	70.6	69.4	26.48	25.51	25.54	37.2	35.8	36.0	71.2	71.3	70.9
Machine tools.....	119.9	117.6	115.8	120.0	110.8	110.5	28.44	26.78	27.12	38.4	36.3	36.8	74.0	73.8	73.8
	118.0	118.8	108.0	107.6	106.9	97.9	22.62	22.40	22.53	38.8	38.5	39.6	58.2	58.2	57.7
			69.3	66.9	61.3	56.5	26.08	24.83	24.09	41.0	39.6	38.0	63.5	67.9	66.0
							24.39	24.55	24.55	38.1	37.9	38.4	89.8	90.8	87.8

foundry and machine-shop products.....	85.3	81.7	83.5	78.9	83.4	77.5	98.0	75.9	91.6	70.6	90.4	29.73	28.35	25.51	37.7	37.2	36.5	36.7	31.0	73.2	73.0	78.6	71.3	78.5	70.9
Machine tools	119.9	117.6	115.8	120.0	110.8	110.5	28.44	26.78	27.12	38.4	36.3	36.5	36.8	36.3	38.4	74.9	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
Radios and phonographs.....	118.0	118.8	108.0	107.6	106.9	97.9	22.62	22.40	22.53	38.8	36.3	36.5	36.8	36.3	38.8	58.2	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7
Textile machinery and parts.....	67.0	64.2	61.3	66.9	61.3	56.5	26.08	24.83	24.09	38.0	36.6	36.6	36.6	36.6	38.0	63.5	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9
Typewriters and parts.....	127.9	128.9	125.3	130.3	130.9	128.1	24.46	24.39	24.55	38.1	37.9	37.9	37.9	37.9	38.1	64.1	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
Transportation equipment	96.1	91.6	79.4	98.7	95.9	83.8	32.64	33.64	33.88	36.4	37.1	38.6	38.6	37.1	38.6	89.8	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
Aircraft.....	845.1	814.9	785.8	879.6	799.0	780.8	31.72	29.81	30.79	42.0	40.2	40.4	40.4	40.2	40.4	76.5	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
Automobiles.....	106.9	101.9	86.3	107.4	107.6	91.3	33.15	34.89	34.98	36.0	37.5	38.7	38.7	37.5	38.7	92.4	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
Cars, electric- and steam-railroad.....	29.8	26.3	25.3	28.2	23.1	23.5	25.93	24.21	25.62	35.6	31.7	32.9	32.9	31.7	32.9	72.8	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
Locomotives.....	17.4	16.9	16.1	13.7	12.8	11.1	25.34	24.30	24.14	32.9	31.7	32.9	32.9	31.7	32.9	77.0	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
Shipbuilding	100.5	96.6	92.1	107.3	94.2	95.1	31.87	29.05	30.75	37.5	34.5	36.9	36.9	34.5	36.9	84.7	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
Nonferrous metals and their products	94.8	95.4	92.2	90.1	90.2	88.5	25.76	25.70	26.06	38.6	38.7	39.7	39.7	38.7	39.7	66.7	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
Aluminum manufactures.....	140.4	143.2	142.4	144.0	148.0	148.4	26.33	26.44	27.14	38.5	38.3	38.5	38.5	38.3	38.5	70.8	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
Brass, bronze, and copper products.....	100.2	100.5	96.4	98.9	99.8	96.2	26.92	27.14	27.28	38.2	38.3	38.5	38.5	38.3	38.5	70.8	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
Clocks and watches and time-recording devices.....	82.9	84.1	83.6	83.2	87.1	85.6	21.23	21.88	21.66	36.9	38.1	37.7	37.7	37.7	37.7	57.6	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9
Jewelry.....	96.9	101.0	100.3	84.9	82.7	91.8	24.11	22.81	23.89	40.8	39.2	43.2	43.2	39.2	43.2	59.2	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6
Lighting equipment.....	66.9	66.5	64.0	68.3	66.2	62.4	28.07	27.39	26.77	43.3	42.4	41.5	41.5	42.4	41.5	65.0	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9
Silverware and plated ware.....	71.1	71.1	66.4	68.2	65.8	62.2	26.58	26.03	26.34	38.4	37.9	38.2	38.2	37.9	38.2	68.2	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
Smelting and refining—Copper, lead, and zinc	64.1	65.2	65.7	56.1	56.2	60.0	20.14	19.91	21.09	38.0	37.6	41.0	41.0	37.6	41.0	53.2	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
Lumber and allied products	79.8	79.5	79.7	67.8	64.9	63.4	20.60	19.75	20.77	39.4	37.9	40.5	40.5	37.9	40.5	52.7	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4
Furniture.....	54.0	54.9	54.0	44.6	44.5	46.0	21.71	21.40	22.40	40.2	39.7	42.4	42.4	39.7	42.4	54.1	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
Millwork	50.9	52.3	53.1	44.9	46.4	50.4	19.27	19.57	20.94	36.7	36.7	37.0	37.0	36.7	37.0	53.3	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
Sawmills.....	70.5	71.6	70.1	63.5	63.8	63.0	24.03	23.82	23.96	36.5	36.3	37.1	37.1	36.3	37.1	65.1	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
Stone, clay, and glass products.....	51.3	52.4	52.0	39.4	39.0	40.6	20.06	19.46	20.37	37.2	37.1	38.5	38.5	37.1	38.5	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
Brick, tile, and terra cotta.....	62.6	67.8	70.1	57.2	63.7	65.4	25.50	26.15	26.02	37.1	38.0	37.8	37.8	38.0	37.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
Cement.....	93.0	92.1	87.5	99.4	98.6	92.9	25.76	25.68	25.47	35.7	35.7	35.6	35.6	35.7	35.6	72.3	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
Glass.....	42.3	42.9	42.3	31.4	30.7	30.1	25.08	24.12	23.87	35.4	35.4	35.2	35.2	35.4	35.2	71.0	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
Marble, granite, slate, and other products.....	79.9	80.0	77.7	75.5	74.5	73.2	23.56	23.12	23.41	37.3	36.8	37.2	37.2	36.8	37.2	63.1	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
Pottery.....	98.6	96.9	97.5	83.3	78.4	83.1	16.99	16.35	17.00	35.7	34.6	35.5	35.5	34.6	35.5	48.2	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
Textiles and their products	91.8	89.5	87.2	81.1	77.3	76.5	16.80	16.35	16.65	37.1	36.3	37.0	37.0	36.3	37.0	46.1	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
Fabrics	81.5	79.5	76.7	71.1	66.9	66.0	23.03	22.29	22.78	36.8	35.5	36.0	36.0	35.5	36.0	62.6	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
Carpets and rugs.....	87.1	86.1	83.7	75.7	73.6	72.4	14.13	13.89	14.04	36.8	36.2	36.8	36.8	36.2	36.8	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4
Cotton goods.....	84.5	83.0	79.9	82.2	77.3	77.4	18.46	17.81	18.56	39.1	38.0	39.9	39.9	38.0	39.9	47.7	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
Cotton small wares.....	112.1	109.3	105.8	97.2	92.7	92.0	20.87	20.47	20.99	39.0	38.2	39.2	39.2	38.2	39.2	53.2	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
Dyeing and finishing textiles.....	82.4	82.8	89.1	75.3	70.1	78.0	23.84	21.77	22.13	34.0	31.5	31.2	31.2	31.5	31.2	70.5	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
Hats, fur-felt.....	115.1	114.2	114.5	119.5	118.5	122.1	18.15	18.18	18.68	36.8	36.8	37.7	37.7	36.8	37.7	50.4	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
Knit goods.....	145.7	144.8	143.9	164.1	165.0	167.0	19.51	19.74	20.13	36.9	37.2	37.5	37.5	37.2	37.5	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8
Hosiery.....	79.0	78.2	83.3	73.3	68.6	77.0	17.87	16.81	17.91	38.0	36.6	39.2	39.2	36.6	39.2	46.7	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9	45.9
Knitted underwear.....	71.2	70.9	70.2	62.4	61.4	62.7	14.75	14.58	15.06	35.0	35.0	36.1	36.1	35.0	36.1	42.2	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
Knitted cloth.....	160.2	155.8	156.3	126.8	119.6	131.0	17.93	17.45	18.90	38.1	35.6	40.8	40.8	35.6	40.8	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9
Silk and rayon goods.....	63.2	61.7	61.2	51.8	48.6	50.2	15.79	15.15	15.83	37.2	35.6	37.2	37.2	35.6	37.2	42.3	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1
Woolen and worsted goods.....	83.3	78.4	71.9	72.8	63.7	58.1	19.80	18.78	18.75	37.8	35.8	35.6	35.6	35.8	35.6	52.4	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6

See footnotes at end of table.

TABLE 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued

MANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938
<i>Nondurable goods—Continued</i>															
Textiles and their products—Continued.															
Wearing apparel.....	112.2	112.0	119.6	84.7	78.0	93.0	\$17.61	\$16.35	\$18.01	33.1	31.4	33.1	52.1	51.0	53.1
Clothing, men's.....	97.1	98.1	104.5	68.3	63.1	74.9	18.39	16.73	18.68	31.5	28.9	31.4	58.7	57.2	59.1
Clothing, women's.....	160.6	158.5	171.4	114.8	101.7	128.8	18.88	17.10	19.94	33.5	31.1	33.0	51.8	50.5	54.8
Corsets and allied garments.....	99.6	98.5	98.9	102.8	99.8	104.8	17.38	16.96	17.75	37.3	36.8	38.8	46.3	46.0	45.8
Men's furnishings.....	149.0	149.7	149.2	143.3	150.7	140.1	15.08	15.91	14.85	35.6	38.3	36.7	37.9	38.0	36.4
Millinery.....	57.8	55.1	74.2	43.2	40.4	62.7	19.12	18.99	21.92	28.7	28.6	33.9	63.9	66.3	62.3
Shirts and collars.....	116.4	117.7	119.2	105.3	104.1	99.3	14.00	13.70	12.84	35.4	35.3	34.7	39.6	38.9	37.0
Leather and its manufactures.	88.6	84.8	89.6	70.0	62.4	69.6	18.62	17.22	18.32	36.2	32.8	35.3	52.6	53.3	53.0
Boots and shoes.....	87.6	83.3	89.9	63.3	54.4	64.5	17.11	15.41	16.97	35.5	31.3	34.6	50.0	50.8	50.6
Leather.....	85.3	84.0	81.2	87.6	84.7	81.7	24.77	24.30	24.23	39.2	38.6	38.5	63.1	62.9	63.0
Food and kindred products	120.1	123.4	128.8	120.9	122.4	127.0	24.72	24.22	24.11	40.4	40.1	41.0	61.9	61.2	60.9
Baking.....	143.5	144.6	144.3	138.2	139.7	139.5	25.26	25.21	25.30	41.3	41.6	42.0	61.6	61.1	59.8
Beverages.....	223.3	229.2	233.6	257.2	264.7	272.6	32.02	32.11	32.50	37.4	37.8	38.5	86.4	85.7	85.5
Butter.....	95.1	96.8	99.4	80.4	82.4	85.6	22.06	22.27	22.52	45.4	45.8	46.6	48.8	48.7	48.3
Canning and preserving.....	85.3	103.3	147.3	77.4	86.0	130.3	16.55	15.14	16.07	35.4	33.5	37.3	48.1	47.0	44.9
Confectionery.....	91.3	90.6	93.0	91.5	84.9	91.6	18.65	17.40	18.23	40.3	37.8	46.7	46.6	45.9	45.9
Flour.....	78.1	78.2	77.5	73.0	73.8	79.7	24.42	24.67	26.88	40.8	41.6	45.2	59.7	59.5	58.7
Ice cream.....	68.7	70.4	73.7	60.0	60.7	63.6	29.21	28.89	29.06	45.2	44.9	45.1	63.8	63.5	63.4
Slaughtering and meat packing.....	102.4	100.7	97.4	112.5	110.0	110.0	27.68	27.54	28.51	40.8	40.5	41.8	68.2	68.5	68.5
Sugar, beet.....	230.7	274.8	270.3	221.9	275.3	228.4	24.75	25.77	21.74	47.0	51.2	42.5	53.0	50.6	51.4
Sugar, cane.....	84.4	86.9	89.0	72.9	75.4	79.3	23.29	23.46	23.96	38.2	37.7	38.5	61.0	62.2	62.3
Tobacco manufactures	65.2	66.9	66.3	59.8	59.8	60.7	18.92	18.55	16.84	35.9	36.8	37.1	46.9	46.2	45.6
Chewing and smoking tobacco and snuff.....	62.1	61.9	57.7	73.0	69.1	63.3	18.40	17.47	17.17	36.3	34.2	35.0	50.9	51.3	49.3
Cigars and cigarettes.....	65.6	67.5	67.4	57.9	58.5	60.3	16.56	16.33	16.77	35.9	35.9	37.4	46.4	45.6	45.2
Paper and printing.	108.0	107.0	105.5	107.3	103.3	103.7	27.58	27.58	28.14	38.6	37.9	38.6	77.1	76.2	76.4
Boxes, paper.....	103.9	105.2	102.8	109.4	110.0	112.7	21.49	21.34	22.29	40.3	40.4	42.2	53.8	53.3	53.2
Paper and pulp.....	106.3	105.9	104.8	103.4	102.9	106.5	23.85	23.78	24.85	39.0	38.9	40.6	61.3	61.3	61.3

Printing and publishing: Book and job.....	103.7	101.4	99.6	96.9	89.1	87.9	31.10	29.22	29.35	39.3	37.1	37.3	79.8	79.9
Newspapers and periodicals.....	108.0	107.1	106.0	113.2	109.6	108.7	38.56	37.11	37.25	36.7	36.4	36.5	101.1	99.1
Chemicals and allied products, and petroleum refining.....	112.7	113.0	113.4	120.1	119.1	120.1	28.52	28.26	28.41	38.2	37.8	38.7	74.3	73.8
Petroleum refining.....	118.1	118.9	119.5	134.1	133.6	132.8	35.30	34.86	34.45	36.4	35.8	35.5	97.4	97.6
Other than petroleum refining.....	111.4	111.6	111.9	115.8	114.6	116.2	25.41	25.79	25.79	38.9	38.6	39.9	65.8	64.8
Chemicals.....	116.9	117.2	114.8	129.8	128.1	128.1	30.72	30.22	30.88	39.4	38.9	39.8	77.6	77.5
Cottonseed—oil, cake, and meal.....	113.9	116.3	122.1	95.5	100.1	104.0	12.76	13.11	13.04	43.4	44.7	51.3	29.0	25.2
Druggists' preparations.....	109.2	109.7	110.3	120.2	119.6	123.9	24.80	24.54	25.31	39.6	38.7	40.3	59.3	58.9
Explosives.....	82.7	82.8	84.1	95.1	91.7	96.5	31.94	30.45	31.62	39.5	38.0	39.4	80.1	80.3
Fertilizers.....	82.3	78.5	79.5	70.0	65.2	70.1	15.75	16.38	16.41	35.5	33.9	36.7	44.4	44.8
Paints and varnishes.....	112.4	112.4	112.9	115.4	113.8	116.3	27.80	27.34	27.83	39.9	39.4	40.1	69.9	69.4
Rayon and allied products.....	311.3	312.8	314.4	302.4	302.7	302.6	23.80	23.74	23.63	37.1	37.0	37.0	64.1	63.9
Soap.....	88.6	88.9	93.2	89.7	88.3	94.8	28.80	28.29	28.98	38.8	38.0	39.4	74.5	73.7
Rubber products.....	83.6	82.4	77.7	89.0	85.2	79.7	28.40	27.58	27.27	37.4	36.7	36.6	76.4	75.6
Rubber boots and shoes.....	65.1	63.4	60.1	65.9	60.6	61.6	23.17	21.88	23.48	38.8	36.6	38.7	59.7	60.7
Rubber tires and inner tubes.....	67.2	66.1	63.5	79.0	75.3	69.1	33.80	32.77	31.25	33.2	34.5	33.1	95.2	94.4
Rubber goods, other.....	134.7	133.6	123.3	133.7	130.7	122.6	23.44	23.09	23.43	39.4	39.2	40.0	59.5	59.2

NONMANUFACTURING

[Indexes are based on 12-month average, 1929=100]

Coal mining:	51.3	51.0	52.4	42.5	36.2	43.4	\$26.99	\$23.14	\$26.99	29.3	24.9	28.8	Cents	Cents
Anthracite ¹	89.3	88.6	87.2	80.9	81.4	78.3	24.05	24.31	23.84	27.5	27.7	26.8	91.7	92.5
Bituminous ²	62.3	61.9	57.9	54.3	52.3	49.2	27.16	26.36	26.52	39.8	38.7	39.5	88.1	88.7
Metalliferous mining.....	41.4	44.4	44.4	33.7	37.2	39.2	20.42	21.03	22.37	37.2	38.1	40.9	68.4	67.5
Quarrying and nonmetallic mining.....	67.7	68.3	69.5	62.5	63.3	63.7	33.41	34.22	33.81	39.0	39.0	39.7	55.4	54.4
Crude-petroleum producing.....													86.1	83.9
Public utilities:														
Telephone and telegraph ³	74.2	74.4	74.7	92.7	93.0	95.3	30.71	30.96	31.57	39.3	39.2	39.8	81.2	82.7
Electric light and power and manufactured gas ⁴	91.4	91.9	92.5	98.2	98.6	99.9	33.72	33.61	33.72	39.9	39.8	39.8	84.5	84.5
Electric-railroad and motorbus operation and maintenance ⁵	69.4	69.5	69.9	69.5	68.8	68.9	32.59	32.35	32.23	45.6	44.9	44.7	71.1	71.2
Trade:														
Wholesale ⁶	90.0	89.8	89.1	75.6	75.4	75.1	29.10	29.35	29.70	41.8	41.8	42.3	69.6	70.6
Retail ⁷	98.1	86.9	85.9	79.4	71.5	70.8	20.13	20.76	21.04	42.7	42.3	42.4	52.6	53.8
General merchandising ⁸	146.0	104.5	99.4	122.9	91.8	88.3	16.95	17.43	17.62	41.0	43.4	39.0	44.4	48.1
Other than general merchandising ⁹	86.0	82.3	82.3	70.3	67.3	67.2	24.12	23.91	24.04	43.5	43.4	43.5	56.1	55.7

See footnotes at end of table.

TABLE 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued

NONMANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938	Decem-ber 1938	Novem-ber 1938	Octo-ber 1938
Hotels (year-round) ¹	91.9	92.5	92.9	81.1	81.3	80.8	\$15.02	\$15.07	\$15.01	46.3	47.2	46.7	32.3	31.8	31.9
Laundries ²	93.4	93.7	94.4	80.0	79.3	78.5	17.43	17.30	17.24	42.2	41.8	41.4	41.4	41.6	41.8
Dyeing and cleaning ²	97.9	102.5	106.8	68.3	73.9	78.0	19.23	19.66	19.91	40.7	41.4	42.1	48.7	48.5	47.9
Brokerage ³	+2	+7	-9	+9	+1.5	+1.2	36.59	36.22	35.76	(6)	(6)	(6)	(6)	(6)	(6)
Insurance ³	+1	-2	-5	+1.2	+1.3	+2	35.79	36.00	35.56	(6)	(6)	(6)	(6)	(6)	(6)
Building construction ⁴	-6.7	-4.2	+3.3	-6.6	-8.4	+5.2	28.97	28.95	30.11	31.7	31.9	33.8	91.4	90.7	89.2

¹ Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments, as all reporting firms do not furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample. Hours and earnings for all manufacturing industries now relate to 87 industries instead of 89 which were covered in the July and prior issues of the pamphlet. The 2 industries excluded are electric- and steam-railroad repair shops. The averages for the durable goods group have also been affected by this exclusion. See text in section headed, "Employment, pay rolls, hours, and earnings."

² Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, "Employment and Pay Rolls."

³ Average weekly earnings, hourly earnings, and hours not strictly comparable with

figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁴ Cash payments only; the additional value of board, room, and tips cannot be com-

puted. Indexes of employment and pay rolls are not available; percentage changes from pre-

ceding month substituted.

⁵ Not available.

⁶ Percentage change in employment from August to September 1938 revised from

+0.6 to -0.3.

⁷ September 1938 indexes for retail trade revised as follows: Total, employment 84.7, pay roll 69.4; general merchandising group, employment 97.0, pay roll 85.3.

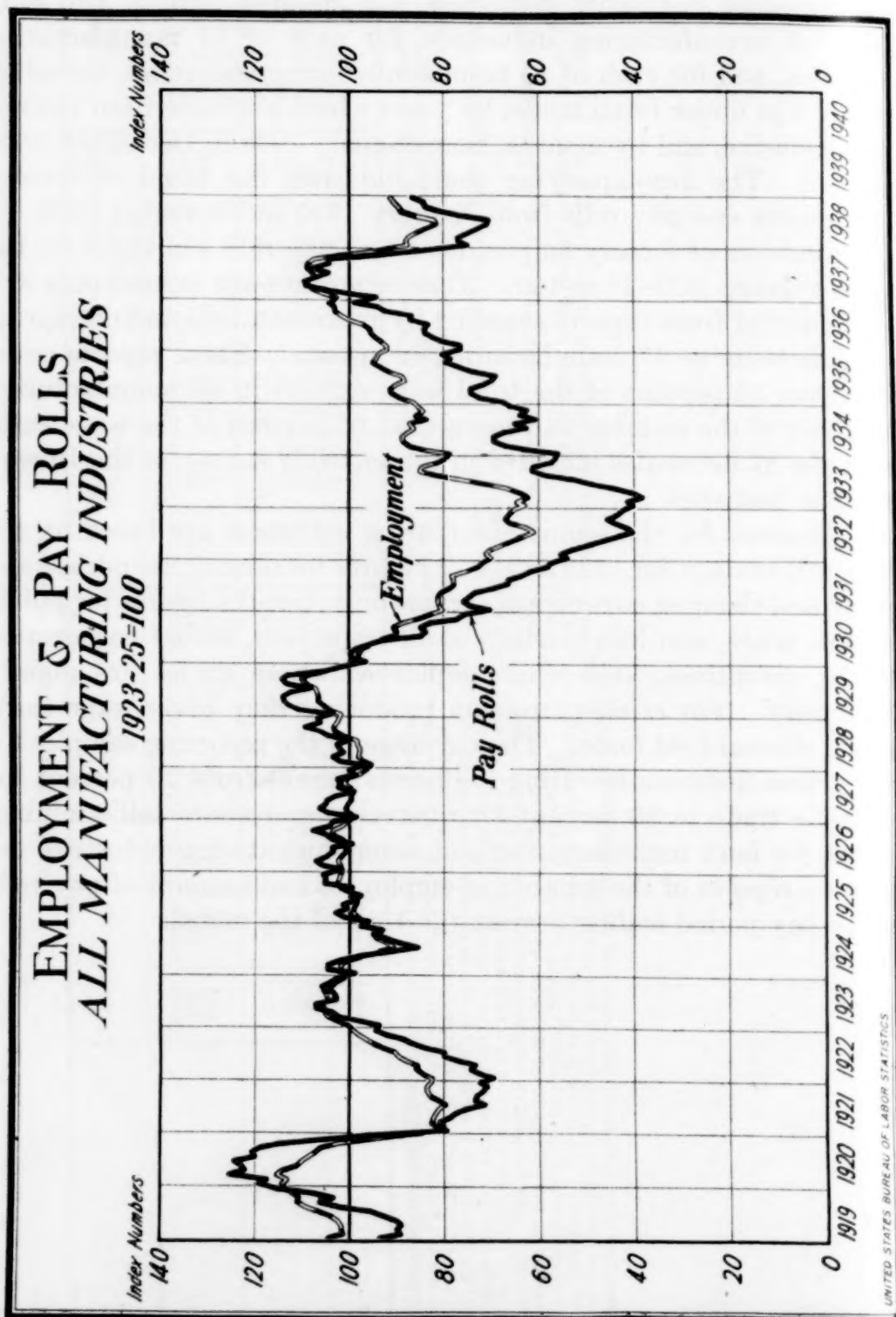
INDEXES OF EMPLOYMENT AND PAY ROLLS

Indexes of employment and pay rolls are given in table 2 for all manufacturing industries combined, for specified groups and subgroups of manufacturing industries, for each of 87 manufacturing industries, and for each of 13 nonmanufacturing industries, including 2 subgroups under retail trade, by years where available from 1923 to 1938, inclusive, and by months, from January 1938 to December 1938, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to December 1938.

The indexes of factory employment and pay rolls are based on the 3-year average 1923-25 as 100. They relate to wage earners only and are computed from reports supplied by representative manufacturing establishments in 87 manufacturing industries. These reports cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 87 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, and dyeing and cleaning cover wage earners only, but the figures for public utilities, trade, and hotels relate to all employees, except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum producing they cover wage earners and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from 25 percent for wholesale trade to 90 percent for quarrying and nonmetallic mining.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.

Year
month

1923...
1924...
1925...
1926...
1927...
1928...
1929...
1930...
1931...
1932...
1933...
1934...
1935...
1936...
1937...
1938...

Janua...
Febru...
Mare...
April...
May...
June...
July...
Augu...
Septe...
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Y

1923...
1924...
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TABLE 2.—Employment and Pay-Roll Indexes

MANUFACTURING INDUSTRIES

[3-year average, 1923-25=100]

Year and month	All industries		Durable-goods group ¹		Nondurable-goods group ²		Iron and steel and their products, not including machinery					
							Iron and steel group		Blast furnaces, steel works, and rolling mills		Bolts, nuts, washers, and rivets	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	103.8	102.9	104.1	103.2	103.6	102.5	104.1	103.5	104.5	104.5	112.5	111.5
1924.....	96.4	96.0	96.4	95.9	96.4	96.1	97.0	96.5	97.1	96.5	89.5	89.5
1925.....	99.8	101.1	99.5	100.9	100.0	101.4	98.9	100.0	98.4	99.0	98.0	99.0
1926.....	101.7	104.2	102.5	104.8	100.9	103.6	102.3	104.8	101.0	103.0	-----	-----
1927.....	99.5	102.4	96.5	98.9	102.3	106.3	97.1	98.5	95.7	96.7	96.0	95.6
1928.....	99.7	103.5	97.7	102.3	101.6	104.9	97.0	100.6	96.2	100.6	-----	-----
1929.....	106.0	110.4	106.2	111.2	105.9	109.6	103.3	108.3	103.2	109.6	114.0	122.0
1930.....	92.4	89.4	87.6	83.8	96.9	95.6	89.9	86.3	90.3	87.7	-----	-----
1931.....	78.1	67.8	67.7	55.6	87.9	81.4	70.3	55.7	68.4	53.6	74.2	56.2
1932.....	66.3	46.7	52.8	33.4	79.2	61.6	57.4	31.3	57.8	27.4	55.2	32.5
1933.....	73.4	50.1	57.5	36.8	88.5	65.0	65.8	39.9	71.0	40.5	59.8	39.5
1934.....	85.7	64.5	73.0	52.5	97.8	78.0	80.2	53.9	86.2	55.0	76.0	57.2
1935.....	91.3	74.1	81.3	65.0	100.7	84.2	87.1	66.5	92.1	68.7	88.1	73.8
1936.....	97.8	85.6	91.5	81.7	103.8	89.9	99.0	86.6	105.4	92.2	99.5	93.3
1937.....	105.8	102.0	104.0	103.5	107.6	100.4	111.4	109.8	120.0	120.5	113.6	114.6
1938.....	86.8	77.5	77.3	68.2	96.0	88.0	82.7	66.6	87.7	66.9	82.4	69.2
1938												
January.....	87.8	75.0	81.7	67.1	93.7	84.0	86.4	60.9	94.5	60.7	83.1	57.4
February.....	88.2	76.9	80.1	67.2	95.9	87.8	85.3	63.2	92.7	63.7	83.2	61.9
March.....	87.7	77.1	79.3	67.4	95.8	87.9	84.4	64.3	90.9	64.5	81.1	61.6
April.....	85.7	74.6	77.0	65.6	94.0	84.7	82.3	63.3	88.2	64.3	80.0	59.9
May.....	83.4	72.9	75.0	64.2	91.5	82.6	80.7	62.7	85.8	62.9	80.7	65.0
June.....	81.6	70.8	72.4	61.7	90.3	80.9	77.8	59.1	82.3	58.1	77.3	61.1
July.....	81.9	70.6	70.3	58.6	92.9	84.1	76.7	57.4	82.2	56.8	77.2	58.5
August.....	85.7	76.9	71.7	63.7	99.0	91.7	79.4	65.3	83.8	65.3	78.1	66.3
September.....	88.8	81.0	75.3	68.7	101.7	94.9	81.7	68.6	84.7	67.6	81.9	73.1
October.....	89.5	83.8	79.0	75.2	99.4	93.4	83.9	74.9	86.1	73.9	84.9	81.0
November.....	90.5	84.1	82.1	78.3	98.4	90.6	86.5	79.1	89.8	81.9	90.0	90.6
December.....	91.2	86.6	83.1	80.4	98.8	93.5	87.4	80.8	91.1	83.2	91.6	94.4

Iron and steel and their products, not including machinery—Continued

Year and month	Cast-iron pipe		Cutlery (not including silver and plated cutlery) and edge tools		Forgings—iron and steel		Hardware		Plumbers' supplies		Stamped and enameled ware	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	96.0	94.6	99.6	97.9	116.5	113.9	101.6	100.1	89.9	89.5	110.1	111.2
1924.....	101.6	101.7	102.4	101.8	97.4	97.4	96.6	96.3	100.1	100.0	95.7	92.8
1925.....	102.4	103.7	98.0	100.3	86.1	88.7	101.8	103.6	110.0	110.5	94.2	96.0
1926.....	110.1	110.5	-----	-----	-----	-----	100.8	106.3	-----	-----	96.9	98.3
1927.....	101.8	98.2	94.6	93.7	65.5	66.7	93.0	96.1	96.7	94.6	93.0	95.7
1928.....	92.4	85.3	-----	-----	-----	-----	92.8	96.0	-----	-----	104.1	108.0
1929.....	87.8	85.2	89.5	87.5	87.8	97.8	101.7	106.9	92.5	87.2	120.5	125.6
1930.....	80.4	75.3	-----	-----	-----	-----	88.6	81.6	-----	-----	106.3	104.9
1931.....	71.5	55.1	74.2	60.4	41.9	32.5	70.3	58.9	65.1	48.0	85.4	76.0
1932.....	46.3	25.1	67.4	47.2	32.1	17.9	58.9	38.4	48.3	27.3	79.5	56.5
1933.....	42.1	22.1	64.5	43.8	33.4	20.9	63.4	42.6	52.6	30.3	97.2	66.7
1934.....	57.5	34.0	80.0	59.0	46.3	34.4	76.5	56.5	46.3	29.4	131.9	102.3
1935.....	60.3	39.2	81.9	67.0	51.5	42.9	80.8	67.0	66.6	50.0	150.5	128.2
1936.....	69.9	54.4	84.6	74.1	58.6	52.8	85.5	80.7	75.9	60.4	160.2	147.4
1937.....	73.7	65.2	93.7	87.9	69.4	68.4	99.0	100.8	82.6	72.0	171.6	169.1
1938.....	63.3	51.0	78.3	66.3	44.9	36.6	70.1	64.2	72.1	56.5	122.7	115.1
1938												
January.....	61.4	44.7	82.7	66.6	51.6	37.4	75.2	55.5	70.6	53.3	122.5	104.2
February.....	60.6	43.8	82.8	67.2	47.8	35.3	71.8	59.3	71.3	51.6	122.8	109.3
March.....	61.5	48.5	80.4	66.9	45.8	35.4	70.5	56.4	70.6	52.5	128.1	118.8
April.....	63.3	50.5	80.0	63.6	43.6	32.7	64.9	51.8	70.9	54.2	126.0	115.6
May.....	63.3	50.6	76.6	61.7	42.8	31.9	63.5	53.2	71.8	58.9	122.6	109.1
June.....	63.5	51.1	75.4	61.5	40.2	29.3	61.3	52.4	72.5	57.6	112.5	99.7
July.....	61.7	51.9	63.9	52.1	38.5	28.9	56.5	48.3	72.5	55.3	105.1	92.0
August.....	63.0	53.0	74.5	60.9	41.5	34.5	60.6	57.6	73.1	57.3	114.1	109.9
September.....	64.6	53.8	77.7	67.5	43.5	37.7	66.9	65.7	73.2	59.6	121.6	119.9
October.....	65.4	53.8	80.2	73.6	45.6	41.9	79.5	86.3	73.1	62.0	128.7	133.3
November.....	65.7	54.5	82.6	75.5	48.0	44.4	84.4	93.2	73.0	54.8	133.6	133.5
December.....	66.1	55.7	82.9	78.6	49.6	49.4	86.3	90.1	72.6	60.4	134.3	136.0

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued

MANUFACTURING INDUSTRIES—Continued

Year and month	Iron and steel and their products, not including machinery—Continued											
	Steam and hot-water heating apparatus and steam fittings		Stoves		Structural and ornamental		Tin cans and other tinware		Tools, not including edge tools, machine tools, files, and saws		Wirework	
	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls
1923.....	102.2	101.7	106.0	103.5	104.4	104.0	101.0	97.7	105.7	103.1	93.1	89.6
1924.....	97.7	98.0	95.0	96.0	97.7	96.6	100.0	100.0	102.2	101.8	100.0	100.0
1925.....	100.1	100.3	99.0	100.5	97.9	99.4	99.0	102.3	92.1	95.1	106.9	110.4
1926.....	102.6	105.5	104.2	105.8	107.5	109.9						
1927.....	99.3	101.6	96.2	97.5	106.1	108.8	98.4	104.2	91.7	95.6	120.4	122.5
1928.....	92.4	94.4	94.0	93.5	106.5	111.0						
1929.....	91.6	92.4	99.3	98.8	111.2	112.8	104.3	113.6	107.6	117.8	124.2	129.3
1930.....	78.3	69.0	83.1	74.3	98.9	94.2						
1931.....	67.1	46.3	69.4	53.4	76.0	61.5	83.7	83.3	60.4	51.1	95.6	80.6
1932.....	47.4	26.8	55.0	33.4	49.7	29.9	73.3	65.8	48.8	33.2	87.6	56.8
1933.....	51.6	30.6	64.3	40.8	43.3	23.9	77.3	67.6	53.5	37.2	97.9	65.6
1934.....	58.9	39.6	78.4	52.6	54.3	34.7	88.6	78.7	64.6	50.6	124.1	93.4
1935.....	62.7	45.1	88.9	66.9	55.2	36.2	91.0	82.9	70.4	60.6	139.7	117.8
1936.....	75.6	60.9	98.2	81.4	69.1	53.2	99.5	94.5	83.2	78.4	164.2	151.4
1937.....	86.1	77.7	102.0	86.1	79.2	70.8	105.4	109.5	98.4	98.0	194.8	194.7
1938.....	66.7	51.2	73.6	58.8	61.2	50.4	89.3	93.1	76.9	68.2	135.3	128.9
1938												
January.....	64.6	47.8	61.1	41.7	66.2	54.2	87.9	89.6	81.3	70.8	148.1	125.4
February.....	63.7	46.6	70.8	53.8	63.7	52.0	86.9	89.6	79.3	68.0	138.1	118.1
March.....	64.7	47.0	73.3	57.4	62.0	50.6	88.3	92.9	79.2	71.2	134.7	122.7
April.....	63.6	45.9	72.1	56.3	61.2	49.4	88.7	91.2	76.6	65.3	131.0	118.7
May.....	65.1	47.5	73.4	58.4	59.7	48.8	87.5	91.8	74.8	64.0	129.4	114.4
June.....	64.9	51.0	71.4	55.4	58.3	46.7	88.9	92.6	73.0	60.9	115.5	99.8
July.....	67.1	51.5	68.2	52.0	59.1	48.8	91.4	94.4	69.7	57.6	109.6	91.6
August.....	69.0	55.5	76.0	61.5	59.8	51.2	99.5	107.0	71.9	63.0	106.2	99.8
September.....	69.8	53.3	79.7	69.2	60.5	49.7	97.6	103.0	74.8	67.4	127.9	134.2
October.....	71.3	59.0	83.1	75.7	61.1	50.5	86.2	89.2	77.0	71.9	146.5	156.1
November.....	69.1	53.3	78.9	62.7	60.7	50.1	84.6	87.5	80.9	75.8	164.6	180.2
December.....	67.9	56.4	74.7	61.4	61.9	53.2	84.1	87.9	83.9	82.0	171.6	185.9
Machinery, not including transportation equipment												
Year and month	Machinery group		Agricultural implements (including tractors)		Cash registers, adding machines, and calculating machines		Electrical machinery, apparatus, and supplies		Engines, turbines, water wheels and windmills			
	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls		
1923.....	105.8	104.1	110.2	110.1	107.4	105.1	103.0	100.1	99.0	101.6		
1924.....	94.9	94.9	86.8	85.6	97.2	97.3	97.9	99.2	90.0	88.6		
1925.....	99.3	101.0	103.0	104.3	95.4	97.6	99.1	100.7	111.0	109.8		
1926.....	107.4	111.1	117.8	124.1					121.9	134.6		
1927.....	102.4	106.2	116.1	121.7	103.1	100.4			117.3	131.4		
1928.....	104.9	111.3	132.0	140.7					118.3	140.1		
1929.....	125.9	134.3	145.5	154.4	120.8	137.3			127.3	134.4		
1930.....	104.9	102.7	115.2	107.9					107.1	109.3		
1931.....	78.3	64.2	65.8	52.1	87.3	69.1	80.9	68.7	70.3	59.4		
1932.....	57.0	37.3	36.5	23.5	74.9	52.5	60.6	39.7	44.8	27.1		
1933.....	60.8	40.5	43.3	30.0	78.2	60.1	58.8	38.9	48.3	33.8		
1934.....	79.4	59.6	72.2	54.2	108.0	88.5	73.0	54.7	62.0	52.1		
1935.....	89.1	73.5	118.9	103.9	116.0	95.4	80.7	66.6	69.2	61.1		
1936.....	103.3	94.1	139.4	130.2	130.3	115.0	91.5	82.3	81.4	81.2		
1937.....	123.9	126.9	167.4	185.2	150.6	149.6	114.9	115.9	103.6	118.5		
1938.....	90.9	83.1	121.2	124.0	138.6	123.4	81.6	74.9	86.7	94.4		
1938												
January.....	104.0	95.1	158.7	169.1	143.0	134.2	96.0	87.3	92.0	98.8		
February.....	99.7	91.1	152.8	161.8	143.7	129.4	89.9	80.9	91.4	99.2		
March.....	96.9	88.0	150.3	160.7	142.4	130.0	86.5	77.4	89.4	100.8		
April.....	93.2	83.6	147.8	152.9	141.9	120.6	81.6	72.0	92.4	101.7		
May.....	89.7	80.6	133.8	137.2	140.1	122.0	78.1	68.4	90.1	97.1		
June.....	86.1	76.4	125.2	124.1	137.3	121.4	75.3	66.6	85.5	89.4		
July.....	82.9	72.7	100.6	98.6	137.5	123.1	73.0	64.1	82.1	85.9		
August.....	84.1	76.1	99.8	95.6	135.0	120.5	74.0	67.7	82.6	89.9		
September.....	85.5	78.6	90.3	87.1	136.4	120.8	77.4	73.0	83.1	90.0		
October.....	87.2	81.9	93.7	92.4	136.1	119.7	80.7	78.0	83.4	90.4		
November.....	89.5	83.9	96.6	95.0	135.4	119.7	83.2	80.4	83.5	91.6		
December.....	91.8	89.2	105.0	113.5	134.6	118.8	83.7	82.4	85.3	98.0		

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued
MANUFACTURING INDUSTRIES—Continued

Year and month	Machinery, not including transportation equipment—Continued											
	Foundry and machine-shop products		Machine tools		Radios and phonographs		Textile machinery and parts		Typewriters and parts			
	Em- ploy- ment	Pay- rolls	Em- ploy- ment	Pay- rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls		
1923.....	108.4	106.7	108.1	105.3	89.5	88.1	116.4	117.5	100.0	98.4		
1924.....	93.9	93.6	92.0	90.8	105.9	107.5	92.7	86.8	100.0	100.0		
1925.....	97.7	99.7	99.9	103.9	104.6	104.4	90.9	95.7	100.0	101.6		
1926.....	103.3	107.4	119.3	125.3	-----	-----	90.1	95.7	-----	-----		
1927.....	97.7	99.9	114.3	116.3	-----	-----	85.3	93.2	111.5	113.0		
1928.....	98.8	102.6	127.9	139.8	-----	-----	78.5	84.2	-----	-----		
1929.....	111.3	117.9	167.2	187.6	204.5	202.9	88.1	96.7	127.1	130.1		
1930.....	94.2	89.0	126.0	121.9	141.0	139.8	71.2	66.0	-----	-----		
1931.....	69.7	55.4	74.7	61.5	124.4	96.5	61.3	54.3	77.8	60.0		
1932.....	51.1	31.9	42.1	28.6	80.4	60.5	48.4	35.1	61.6	35.8		
1933.....	54.6	34.9	44.9	30.9	112.1	81.4	60.5	47.9	68.5	44.1		
1934.....	71.0	52.2	75.8	60.7	158.6	110.0	67.6	55.6	102.5	87.6		
1935.....	78.5	62.6	99.5	91.4	152.7	117.8	62.1	54.3	110.0	97.0		
1936.....	92.4	83.0	125.2	125.5	168.1	136.8	69.3	66.4	119.5	115.4		
1937.....	110.5	110.6	158.7	179.3	154.3	134.4	80.6	86.3	152.3	152.8		
1938.....	81.6	71.2	123.4	115.5	90.9	78.9	60.5	53.3	119.4	104.7		
1938												
January.....	92.4	79.8	148.1	151.2	86.0	72.7	66.5	54.9	119.5	88.0		
February.....	89.1	77.5	142.3	138.4	84.4	68.3	63.9	52.8	116.8	102.4		
March.....	87.1	75.2	135.8	129.1	76.1	57.9	61.5	51.3	115.4	94.1		
April.....	83.5	71.4	129.9	116.5	77.9	65.8	58.3	49.4	114.1	91.5		
May.....	81.0	70.0	123.8	111.3	76.3	66.8	58.0	49.8	115.6	92.4		
June.....	77.4	65.7	115.8	99.0	81.6	71.6	54.2	47.2	115.0	93.7		
July.....	75.8	63.7	110.6	94.2	81.6	72.4	53.9	45.3	115.5	91.5		
August.....	77.1	67.2	107.1	97.4	88.9	75.5	57.7	50.2	117.7	97.9		
September.....	77.7	68.1	114.2	107.8	93.5	83.5	59.9	54.1	121.6	115.7		
October.....	77.5	69.4	115.8	110.5	108.0	97.9	61.3	56.5	125.3	128.1		
November.....	78.9	70.6	117.6	110.8	118.8	106.9	64.2	61.3	128.9	130.9		
December.....	81.7	75.9	119.9	120.0	118.0	107.6	67.0	66.9	127.9	130.3		
Year and month	Transportation equipment											
	Transportation group		Aircraft		Automobiles		Cars, electric and steam-railroad		Locomotives		Shipbuilding	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	107.6	107.7	103.6	103.4	100.6	100.6	126.9	128.7	157.7	168.1	114.5	112.8
1924.....	93.1	90.8	100.0	100.0	93.6	90.6	93.8	94.3	76.4	72.9	93.2	94.9
1925.....	99.3	101.5	96.4	96.6	105.8	108.8	79.3	77.0	65.9	59.0	92.3	92.3
1926.....	99.1	99.5	-----	-----	104.8	104.8	75.0	70.9	86.2	80.6	97.4	100.9
1927.....	87.9	89.8	157.9	156.8	91.9	93.3	59.9	60.4	66.7	57.2	101.3	108.3
1928.....	96.2	101.6	-----	-----	108.1	113.9	48.4	48.2	45.4	39.6	79.5	85.0
1929.....	103.5	105.4	525.2	501.5	111.3	111.6	63.1	63.1	56.8	58.3	101.3	109.7
1930.....	80.2	70.2	-----	-----	80.3	65.7	54.7	53.2	52.3	51.5	107.3	113.5
1931.....	66.3	52.3	353.1	354.8	71.0	53.4	29.6	25.4	28.0	18.1	83.0	76.8
1932.....	55.5	37.8	244.2	234.3	60.5	38.8	24.9	20.5	17.7	9.0	66.7	54.1
1933.....	54.5	35.6	279.6	236.2	60.6	38.3	22.5	14.6	12.2	6.0	56.8	42.1
1934.....	83.4	61.4	358.5	283.9	94.5	68.2	36.6	27.3	23.9	13.9	74.6	58.9
1935.....	95.3	78.1	407.2	341.3	110.4	89.5	33.9	25.6	19.5	12.8	82.4	68.8
1936.....	102.9	93.4	655.6	551.7	113.9	102.8	46.4	39.4	27.6	21.9	103.9	95.5
1937.....	117.7	115.7	908.9	818.0	128.3	124.1	60.0	61.4	47.9	47.5	111.0	113.2
1938.....	73.3	68.7	828.2	784.9	75.9	69.3	29.5	27.6	25.5	21.0	96.8	100.7
1938												
January.....	82.6	67.6	877.6	786.8	84.7	64.4	39.4	37.7	42.9	37.6	104.8	109.8
February.....	79.9	65.9	882.9	814.7	82.1	62.7	37.3	36.9	39.4	36.9	100.6	105.2
March.....	77.4	65.1	887.9	816.4	79.3	62.3	34.4	33.5	35.9	32.5	100.0	105.1
April.....	71.9	64.9	874.6	803.6	72.9	63.3	32.9	30.5	30.8	25.6	95.7	101.9
May.....	68.2	59.5	847.5	797.0	68.6	56.8	28.4	26.5	27.1	22.3	98.4	102.6
June.....	62.4	57.4	813.6	764.3	61.5	54.4	25.3	24.0	25.1	19.6	98.2	104.7
July.....	55.5	51.0	794.6	736.5	53.1	47.4	22.8	20.2	20.2	15.5	95.8	99.9
August.....	51.0	49.9	758.7	712.8	48.0	47.0	24.3	22.3	18.0	13.1	89.1	90.0
September.....	63.7	64.7	755.5	727.2	64.9	66.3	27.4	25.3	16.1	11.1	89.9	92.3
October.....	79.4	83.8	785.8	780.8	86.3	91.3	25.3	23.5	16.1	11.1	92.1	95.1
November.....	91.6	95.9	814.9	799.0	101.9	107.6	26.3	23.1	16.9	12.8	96.6	94.2
December.....	96.1	98.7	845.1	879.6	106.9	107.4	29.8	28.2	17.4	13.7	100.5	107.3

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued
MANUFACTURING INDUSTRIES—Continued

Year and month	Nonferrous metals and their products											
	Nonferrous group		Aluminum manufactures		Brass, bronze, and copper products		Clocks, watches, and time-recording devices		Jewelry		Lighting equipment	
	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls
1923	104.8	102.8	106.3	100.2	103.4	101.3	97.6	95.7	105.1	105.9	101.3	96.7
1924	96.8	96.3	100.0	100.0	96.6	95.6	100.0	100.0	99.8	91.8	100.0	100.0
1925	98.4	100.9	93.7	99.8	100.0	103.1	102.4	104.3	95.1	102.3	98.7	103.3
1926					102.7	107.4						
1927	97.0	101.1	96.6	105.5	101.2	104.7	102.9	108.1	96.2	106.9	92.9	97.3
1928					107.3	115.6						
1929	110.2	115.3	138.4	150.0	121.5	128.3	98.2	102.2	111.4	113.3	104.2	110.6
1930					96.6	88.7						
1931	72.4	61.4	90.2	81.3	74.9	60.3	74.3	62.2	74.1	65.6	65.3	60.4
1932	58.0	38.6	73.0	46.7	62.5	39.1	58.1	38.0	59.5	42.8	47.0	35.3
1933	62.6	41.1	89.1	60.1	73.4	48.0	58.9	39.7	59.3	37.7	46.5	31.6
1934	76.3	55.3	106.0	77.6	86.6	62.8	74.1	59.5	73.0	53.3	58.3	42.5
1935	86.3	68.3	125.9	102.8	96.7	79.0	82.6	72.5	78.7	60.0	73.6	57.3
1936	96.2	82.7	144.4	127.0	108.5	96.9	94.8	90.9	83.4	65.5	87.3	74.2
1937	108.8	105.1	164.0	164.6	122.4	123.4	106.4	113.1	94.1	79.9	101.6	94.2
1938	86.8	76.6	133.0	128.7	91.8	83.2	81.3	74.8	87.5	71.1	74.9	61.8
1938												
January	88.8	74.9	138.0	124.9	93.1	77.1	84.5	82.0	84.1	68.0	73.9	53.7
February	88.0	74.4	134.9	125.2	91.2	75.8	88.1	84.3	86.1	69.1	73.8	56.2
March	86.9	74.3	133.5	129.5	90.5	77.5	85.9	79.1	86.8	67.9	71.6	55.6
April	84.2	69.0	129.0	119.3	88.8	74.5	81.7	64.7	80.0	58.8	70.6	51.8
May	81.8	69.0	126.1	119.0	87.3	76.0	78.9	64.4	75.3	56.9	67.9	51.7
June	79.8	66.3	121.5	109.4	85.7	72.5	75.2	59.6	77.6	60.4	63.7	50.6
July	79.1	67.0	122.0	111.5	86.1	77.9	73.6	59.6	79.2	61.2	62.8	49.6
August	83.0	74.1	128.5	125.8	89.0	83.4	77.7	70.3	86.7	70.1	68.4	58.2
September	87.9	81.4	136.3	138.8	92.7	89.1	79.9	78.1	96.0	81.4	76.2	69.2
October	92.2	88.5	142.4	148.4	96.4	96.2	83.6	85.6	100.3	91.8	85.4	78.1
November	95.4	90.2	143.2	148.0	100.5	99.8	84.1	87.1	101.0	82.7	91.6	83.4
December	94.8	90.1	140.4	144.0	100.2	98.9	82.9	83.2	96.9	84.9	94.2	84.7
Year and month	Nonferrous metals and their products				Lumber and allied products							
	Silverware and plated ware		Smelting and refining—copper, lead, and zinc		Lumber group		Furniture		Lumber, millwork		Lumber, sawmills	
	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls
1923	100.6	98.1	102.8	103.2	101.5	100.0	98.1	96.9	96.7	95.6	103.6	102.5
1924	100.0	100.0	100.0	100.0	98.3	98.5	96.2	96.4	98.8	99.3	98.8	99.2
1925	99.4	101.9	97.2	96.8	100.2	101.5	105.7	106.7	104.5	105.1	97.6	98.3
1926					100.3	102.4	110.3	113.4	102.7	103.3	95.5	96.6
1927	98.4	102.3	89.9	90.4	93.9	96.6	108.8	111.8	90.7	90.5	86.6	89.0
1928					92.1	94.1	106.7	107.5	86.7	86.1	84.4	87.2
1929	92.6	96.5	91.3	99.4	95.2	97.3	111.9	114.0	84.6	83.5	87.7	90.7
1930					75.8	72.5	89.0	80.7	64.4	61.1	67.6	67.6
1931	65.3	54.3	54.4	45.9	56.0	46.2	73.7	59.2	51.1	42.0	41.1	33.6
1932	53.7	36.8	41.4	26.6	43.6	26.6	57.4	34.6	35.0	21.4	31.7	18.4
1933	54.1	35.1	42.9	27.4	49.9	30.3	61.0	35.9	33.2	18.7	39.6	24.4
1934	62.4	45.1	57.2	39.6	56.6	37.4	64.6	42.1	36.8	22.0	48.2	32.8
1935	60.1	47.3	66.2	50.3	63.6	45.9	75.6	53.6	45.3	30.2	53.4	39.5
1936	57.0	47.2	73.7	62.9	71.1	57.6	84.8	66.0	54.1	41.0	59.1	49.2
1937	64.9	59.8	82.1	81.5	76.6	67.2	94.0	78.0	60.7	49.3	62.1	56.5
1938	60.5	51.9	68.5	63.9	62.6	53.0	75.2	58.6	51.5	41.5	51.0	45.1
1938												
January	59.7	46.3	76.5	73.3	60.0	45.1	75.1	52.0	48.4	34.7	47.9	37.5
February	61.3	48.9	72.5	68.5	60.6	48.0	74.8	56.3	50.5	38.0	48.3	39.3
March	61.6	51.1	70.9	65.5	62.3	51.8	74.6	56.8	50.7	39.5	51.0	44.5
April	60.7	46.5	69.0	64.1	61.6	50.1	71.8	51.9	49.9	38.6	51.0	44.4
May	59.3	46.3	67.0	63.4	61.0	50.5	70.0	50.4	48.7	39.5	51.1	45.4
June	58.4	44.6	64.5	60.4	60.7	51.2	70.8	52.4	49.7	40.3	50.1	45.4
July	50.8	38.1	63.5	56.8	60.7	48.7	71.2	51.3	50.9	41.6	49.8	41.6
August	57.5	48.5	63.1	57.9	64.0	58.1	76.0	62.5	52.8	45.6	52.4	50.2
September	59.8	55.6	65.4	60.3	65.8	60.0	79.0	68.1	54.0	45.5	53.5	50.6
October	64.0	62.4	66.4	62.2	65.7	60.0	79.7	68.4	54.0	46.0	53.1	50.4
November	66.5	66.1	71.1	65.8	65.2	56.2	79.5	64.9	54.9	44.5	52.3	46.4
December	66.9	68.3	72.5	68.2	64.1	56.1	79.8	67.8	54.0	44.6	50.9	44.9

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued

MANUFACTURING INDUSTRIES—Continued

Year and month	Stone, clay, and glass products											
	Stone, clay, and glass group		Brick, tile, and terra cotta		Cement		Glass		Marble, granite, slate, and other products		Pottery	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	100.4	98.3	100.6	98.1	95.0	94.6	105.1	103.4	104.5	101.7	98.5	97.8
1924.....	98.9	100.5	98.7	101.1	101.0	102.9	95.5	96.9	100.0	100.0	103.8	104.3
1925.....	100.7	101.2	100.7	100.8	104.0	102.5	99.4	99.7	95.5	98.3	97.7	97.9
1926.....	103.8	104.2	102.9	101.8	102.1	100.9	103.8	103.9	-----	-----	99.7	99.3
1927.....	99.9	100.5	99.0	96.7	98.3	101.1	94.3	93.6	105.6	113.0	98.0	94.5
1928.....	95.7	96.2	92.3	87.5	92.6	96.9	92.6	94.5	-----	-----	98.8	93.9
1929.....	93.8	93.7	91.5	84.7	90.3	92.9	96.7	100.9	98.7	104.0	94.7	91.4
1930.....	80.2	76.9	72.2	62.2	84.6	83.4	83.8	82.9	-----	-----	82.9	74.1
1931.....	63.7	53.9	50.2	35.2	65.8	56.9	71.5	66.5	72.2	68.8	72.3	56.4
1932.....	46.7	30.6	31.8	15.5	45.8	29.8	59.6	45.5	47.9	35.3	58.6	35.9
1933.....	49.4	30.8	31.3	15.0	42.8	26.4	71.3	52.0	43.1	27.7	63.2	37.4
1934.....	61.6	41.7	38.0	21.2	55.4	38.7	91.5	70.9	43.3	28.3	74.5	49.5
1935.....	66.6	49.0	43.7	27.4	56.0	39.8	96.1	82.2	39.7	26.8	77.1	58.7
1936.....	73.9	60.2	55.2	40.2	62.0	51.0	98.4	91.8	46.8	35.0	78.6	65.5
1937.....	80.6	72.5	60.5	48.2	71.1	65.9	107.4	112.5	49.1	37.8	83.0	76.7
1938.....	66.5	56.6	48.2	34.8	64.5	59.0	83.9	82.9	42.1	31.5	75.0	65.0
1938												
January.....	63.1	47.9	42.8	26.9	54.3	43.9	87.6	77.7	36.7	24.9	74.4	57.6
February.....	63.0	51.3	42.9	28.2	53.3	44.2	85.4	80.7	40.2	30.3	75.1	66.2
March.....	63.7	53.0	43.8	28.8	57.7	49.7	83.5	81.4	41.2	31.6	75.5	67.5
April.....	65.4	54.3	47.0	32.3	64.6	58.0	81.6	77.6	41.8	33.1	74.4	63.8
May.....	66.0	57.7	48.4	35.7	66.7	65.7	80.7	79.1	43.4	35.5	73.3	65.5
June.....	65.8	56.4	48.3	36.0	68.1	65.1	79.3	77.6	43.7	33.8	73.0	61.0
July.....	64.6	53.1	48.8	35.4	70.3	66.0	74.7	69.1	44.0	33.5	69.5	53.1
August.....	66.3	56.5	49.9	37.2	69.9	65.4	78.7	78.6	43.3	32.0	72.3	58.7
September.....	67.8	58.3	51.2	38.6	68.0	63.4	82.1	82.6	43.0	31.3	74.8	63.9
October.....	70.1	63.0	52.0	40.6	70.1	65.4	87.5	92.9	42.3	30.1	77.7	73.2
November.....	71.6	63.8	52.4	39.0	67.8	63.7	92.1	98.6	42.9	30.7	80.0	74.5
December.....	70.5	63.5	51.3	39.4	62.6	57.2	93.0	99.4	42.3	31.4	79.9	75.5
Textiles and their products												
Year and month	Textiles group		Fabric (subgroup)		Carpets and rugs		Cotton goods		Cotton small wares		Dyeing and finishing textiles	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	105.2	105.8	105.4	106.0	103.8	109.2	106.7	110.1	104.4	105.5	97.4	96.1
1924.....	94.9	93.8	94.2	93.4	96.2	93.3	92.5	91.6	92.6	91.8	93.9	92.7
1925.....	99.9	100.4	100.4	100.6	100.0	97.5	100.8	98.3	103.0	102.7	108.7	111.2
1926.....	99.9	100.2	99.2	99.4	97.8	93.8	101.9	98.5	-----	-----	110.8	114.2
1927.....	104.0	106.8	101.3	103.8	96.9	94.5	105.8	105.7	95.3	101.3	113.5	121.5
1928.....	101.3	101.7	96.2	95.8	92.8	85.7	95.5	88.4	-----	-----	114.9	121.8
1929.....	104.8	105.2	99.2	99.4	96.2	90.1	96.1	90.1	97.4	102.1	121.8	124.8
1930.....	92.9	85.6	86.0	79.4	74.2	59.7	80.7	69.4	-----	-----	112.0	108.7
1931.....	87.2	75.2	80.3	70.2	67.5	54.3	74.5	61.0	81.7	76.8	103.3	101.2
1932.....	77.9	53.6	71.9	50.4	52.9	31.4	67.1	43.9	72.2	56.2	92.8	73.8
1933.....	90.5	61.8	86.4	61.4	62.8	41.0	85.9	60.2	84.3	66.5	101.8	77.5
1934.....	96.7	73.4	90.4	69.8	68.7	45.0	89.3	68.2	86.0	71.1	113.6	88.5
1935.....	103.5	83.2	95.0	77.9	81.5	62.5	83.5	65.8	85.8	73.4	118.2	94.5
1936.....	106.7	86.8	96.3	80.6	85.4	66.6	88.8	74.0	87.0	77.8	115.8	97.3
1937.....	108.5	92.4	99.0	88.1	95.7	77.5	95.5	86.9	89.8	82.6	114.8	100.5
1938.....	93.0	75.0	83.6	69.7	69.1	52.3	81.6	66.8	74.2	67.3	104.0	87.2
1938												
January.....	89.7	68.0	82.1	64.4	66.2	40.5	82.6	64.3	71.4	59.0	103.8	84.1
February.....	94.7	77.9	83.1	69.0	71.8	48.5	81.8	65.1	73.0	65.8	105.1	89.7
March.....	95.0	78.0	82.2	67.6	71.8	50.7	82.4	66.5	72.7	67.2	105.2	89.1
April.....	91.8	71.6	79.5	63.3	67.8	46.0	79.3	62.1	70.7	61.3	103.6	86.1
May.....	87.4	66.3	78.0	62.0	63.1	41.5	77.1	60.3	70.4	62.0	101.9	83.2
June.....	84.6	62.4	77.2	61.2	48.0	35.5	76.0	58.5	68.3	59.9	98.0	76.8
July.....	86.6	66.6	80.4	65.7	62.8	44.7	78.2	63.7	67.7	58.8	97.0	78.3
August.....	95.1	80.0	85.1	73.4	67.6	55.4	81.3	68.4	72.1	65.3	101.9	87.4
September.....	97.9	84.0	86.6	74.7	72.7	60.8	83.2	71.0	76.4	71.1	104.1	89.5
October.....	97.5	83.1	87.2	76.5	76.7	66.0	83.7	72.4	79.9	77.4	105.8	92.0
November.....	96.9	78.4	89.5	77.3	79.5	66.9	86.1	73.6	83.0	77.3	109.3	92.7
December.....	98.6	83.3	91.8	81.1	81.5	71.1	87.1	75.7	84.5	82.2	112.1	97.2

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued

MANUFACTURING INDUSTRIES—Continued

Year and month	Textiles and their products—Continued									
	Hats, fur-felt		Knit goods ¹		Silk and rayon goods		Woolen and worsted goods		Wearing apparel (subgroup)	
	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls
1923.....	106.4	107.4	105.1	103.9	99.7	97.4	109.3	109.1	105.4	105.6
1924.....	97.1	90.5	93.9	92.0	94.8	93.0	97.9	97.6	96.1	94.9
1925.....	96.5	102.1	101.0	104.1	105.5	109.6	92.8	93.3	98.5	99.5
1926.....	.....	.....	101.4	108.6	102.9	107.8	84.1	84.0	99.8	99.6
1927.....	101.2	114.1	103.0	116.1	101.5	107.6	86.7	84.7	105.8	107.6
1928.....	.....	.....	104.8	117.4	101.0	107.5	83.1	79.2	108.3	107.5
1929.....	105.3	112.3	112.9	130.1	103.8	105.6	82.6	80.1	113.3	111.0
1930.....	.....	.....	103.2	109.7	95.1	87.2	67.2	60.5	105.0	93.6
1931.....	89.6	82.5	96.3	92.3	86.9	74.8	67.1	57.3	99.7	80.6
1932.....	72.6	54.5	94.2	77.2	74.0	48.4	56.0	38.9	89.1	57.2
1933.....	79.8	59.5	102.7	81.5	87.8	56.9	71.4	49.7	97.7	60.0
1934.....	86.4	71.0	110.5	100.2	88.4	66.0	67.5	49.1	108.7	77.3
1935.....	93.3	82.0	119.0	113.9	86.5	68.8	90.4	71.5	121.0	90.7
1936.....	96.3	88.7	121.8	118.0	77.8	61.5	86.5	68.1	128.9	95.9
1937.....	95.2	89.3	122.3	123.1	78.0	64.6	83.4	72.2	128.2	97.6
1938.....	84.4	74.4	108.7	108.9	59.6	46.5	66.2	53.0	112.9	82.8
1938										
January.....	91.3	77.5	103.4	94.2	57.8	40.1	61.9	51.0	105.3	72.6
February.....	92.4	86.2	107.9	108.4	59.4	45.3	62.6	52.5	119.8	92.8
March.....	92.3	79.9	108.6	110.7	59.8	46.6	54.4	41.1	122.7	95.8
April.....	89.1	63.4	107.8	106.5	59.7	45.4	48.8	35.4	118.5	85.6
May.....	74.4	56.4	103.3	101.6	59.2	46.1	54.1	38.9	107.2	72.5
June.....	61.3	48.5	103.9	99.9	53.5	40.8	61.0	47.4	99.7	62.6
July.....	79.8	74.9	104.6	98.2	55.0	42.2	68.4	55.5	98.9	66.0
August.....	88.1	87.2	109.2	111.7	61.3	50.2	75.1	62.1	116.3	90.4
September.....	90.0	95.0	111.8	116.0	63.2	50.6	72.7	57.5	122.1	99.5
October.....	89.1	78.0	114.5	122.1	61.2	50.2	71.9	58.1	119.6	93.0
November.....	82.8	70.1	114.2	118.5	61.7	48.6	78.4	63.7	112.0	78.0
December.....	82.4	75.3	115.1	119.5	63.2	51.8	85.3	72.8	112.2	84.7

Year and month	Textiles and their products—Continued											
	Clothing, men's		Clothing, women's		Corsets and allied garments		Men's furnishings		Millinery		Shirts and collars	
	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls	Em- plov- ment	Pay rolls
1923.....	107.0	109.3	104.3	103.2	105.2	103.4	94.6	93.6	103.2	100.8	107.9	109.7
1924.....	97.3	96.1	96.6	94.3	100.0	100.0	100.1	96.1	94.8	94.5	93.0	91.9
1925.....	95.7	94.6	99.1	102.5	94.8	96.6	105.3	110.3	102.0	104.7	99.1	98.4
1926.....	97.4	94.8	104.2	104.7	.....	.....	.....	.....	98.0	103.6	101.7	101.9
1927.....	102.5	99.5	121.0	123.6	90.0	96.7	125.7	139.5	104.8	113.9	105.1	109.9
1928.....	101.3	95.5	133.7	132.5	.....	.....	.....	.....	105.7	112.3	106.3	107.1
1929.....	103.2	95.8	146.8	142.6	89.2	97.0	132.7	145.5	101.3	104.0	109.1	109.2
1930.....	91.4	74.7	142.2	127.9	.....	.....	.....	.....	91.3	88.6	102.7	90.3
1931.....	84.9	62.8	135.8	110.5	91.3	89.6	120.1	109.5	83.7	79.2	104.0	82.7
1932.....	79.4	44.8	116.9	76.4	89.3	74.8	103.8	75.2	73.9	60.9	91.0	58.0
1933.....	90.5	52.8	125.1	74.5	91.6	73.2	110.7	79.1	71.0	49.4	103.1	68.3
1934.....	99.3	65.3	150.3	103.0	97.8	86.9	117.8	102.8	72.9	56.5	107.1	85.7
1935.....	111.3	79.7	172.7	120.8	102.2	93.8	125.1	113.3	71.6	58.3	113.9	96.6
1936.....	115.7	81.6	189.0	129.9	99.6	95.0	141.4	122.4	75.6	66.7	120.1	102.1
1937.....	115.4	85.3	184.2	129.2	101.7	97.4	148.1	127.7	73.6	64.6	124.2	106.5
1938.....	96.7	65.2	165.2	116.1	97.5	94.0	131.6	114.1	69.5	59.4	113.0	90.8
1938												
January.....	90.5	58.4	160.0	102.9	96.0	83.7	107.5	81.6	70.2	54.6	92.8	72.2
February.....	103.9	74.1	179.6	134.5	98.3	94.3	126.8	108.4	78.1	69.1	109.6	87.1
March.....	105.7	75.7	182.1	136.1	99.0	99.6	133.3	115.1	82.8	80.6	117.1	94.1
April.....	98.2	64.5	178.7	123.1	99.0	97.0	128.1	102.9	85.1	74.0	115.0	88.7
May.....	82.6	48.0	165.6	109.7	98.3	95.1	126.0	97.7	73.0	55.5	112.0	86.6
June.....	78.2	43.2	148.0	89.5	97.1	85.9	123.8	100.8	60.0	44.5	113.4	83.1
July.....	89.8	57.4	134.6	86.0	93.2	82.5	120.5	94.0	49.9	36.4	107.5	77.8
August.....	104.3	74.4	165.9	128.1	94.7	85.8	127.2	109.5	68.2	59.6	117.3	93.4
September.....	107.5	80.1	177.1	137.6	97.3	96.1	138.1	124.9	79.3	91.6	117.9	97.4
October.....	104.5	74.9	171.4	128.8	98.9	104.8	149.2	140.1	74.2	62.7	119.2	99.3
November.....	98.1	63.1	158.5	101.7	98.5	99.8	149.7	150.7	55.1	40.4	117.7	104.1
December.....	97.1	68.3	160.6	114.8	99.6	102.8	149.0	143.3	57.8	43.2	116.4	105.3

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued

MANUFACTURING INDUSTRIES—Continued

Year and month	Leather and its manufactures						Food and kindred products					
	Leather group		Boots and shoes		Leather		Food group		Baking		Beverages	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	106.6	106.9	106.0	107.6	109.1	107.9	101.4	99.8	100.1	98.0	104.9	104.4
1924.....	96.3	95.3	96.7	95.3	95.4	95.8	99.3	99.3	101.1	101.7	97.0	95.8
1925.....	97.1	97.8	97.3	97.1	95.5	96.3	100.3	100.9	98.8	100.3	98.1	99.8
1926.....	96.6	98.9	95.6	96.1	96.7	99.5	99.7	102.0	101.4	104.1		
1927.....	97.7	100.3	95.6	96.8	96.6	99.3	100.2	103.0	105.9	107.8	96.6	100.0
1928.....	95.6	95.8	92.7	91.3	94.3	95.5	103.8	106.3	112.2	113.3		
1929.....	98.5	99.0	96.7	95.6	91.1	92.8	111.1	112.9	123.6	125.3	101.3	106.1
1930.....	91.2	82.3	90.2	78.3	84.6	83.0	107.8	108.0	121.5	123.7		
1931.....	84.3	72.1	85.3	70.2	76.9	72.5	95.6	92.0	112.6	109.0	85.5	83.1
1932.....	81.2	57.6	84.5	58.3	68.8	54.0	88.6	75.0	106.8	92.3	79.1	71.2
1933.....	87.2	61.2	89.8	61.1	80.7	63.0	100.3	78.7	112.2	89.9	138.2	131.9
1934.....	94.0	73.2	95.0	72.9	89.8	73.3	119.2	98.1	130.3	107.6	188.9	191.5
1935.....	96.1	76.9	95.1	74.1	92.9	81.4	120.1	101.4	134.4	113.6	200.6	215.7
1936.....	95.8	75.9	94.3	71.3	93.7	85.6	123.8	109.8	139.9	124.2	223.9	254.4
1937.....	97.7	81.7	97.2	77.0	91.5	91.4	128.7	125.4	146.7	140.5	243.7	287.9
1938.....	89.5	69.5	90.9	66.3	76.9	75.1	122.3	122.0	143.4	139.5	238.5	282.9
1938												
January.....	89.6	69.0	91.5	67.2	74.9	69.9	114.7	116.6	141.8	136.3	221.5	250.6
February.....	93.5	77.0	96.0	76.5	75.9	72.9	113.3	114.2	141.9	137.3	225.2	261.1
March.....	94.2	76.6	97.2	76.5	74.7	71.1	112.0	113.3	141.7	137.7	230.5	271.2
April.....	92.1	70.6	95.0	69.9	72.9	67.6	112.6	114.1	141.8	137.5	234.9	278.3
May.....	86.0	60.9	87.6	57.6	72.3	67.9	113.6	117.3	141.8	139.5	242.0	290.9
June.....	81.8	57.5	82.5	52.8	72.2	69.2	119.4	121.7	144.2	141.9	251.9	305.7
July.....	89.3	69.4	91.4	67.0	73.9	72.1	128.6	128.5	145.0	142.8	259.6	322.8
August.....	92.7	77.0	94.6	75.1	77.3	77.9	138.3	131.1	144.5	139.8	260.0	322.0
September.....	92.3	74.0	93.8	70.9	78.6	78.9	142.7	136.7	145.6	143.5	250.3	297.6
October.....	89.6	69.6	89.9	64.5	81.2	81.7	128.8	127.0	144.3	139.5	233.6	272.6
November.....	84.8	62.4	83.3	54.4	84.0	84.7	123.4	122.4	144.6	139.7	229.2	264.7
December.....	88.6	70.0	87.6	63.3	85.3	87.6	120.1	120.9	143.5	138.2	223.3	257.2

Food and kindred products—Continued

Year and month	Butter		Canning and preserving		Confectionery		Flour		Ice cream		Slaughtering and meat packing	
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1923.....	106.7	105.7	97.7	97.8	101.7	100.9	104.9	101.9	99.2	98.7	104.7	102.6
1924.....	100.0	100.0	86.9	86.9	96.5	97.7	99.7	101.0	102.0	99.7	100.3	99.9
1925.....	93.3	94.3	115.4	115.3	101.8	101.4	95.4	97.1	98.8	101.6	95.0	97.5
1926.....					105.8	106.8	91.8	94.4	96.3	103.2	93.2	97.8
1927.....	105.6	108.2	112.0	108.7	101.1	104.7	89.4	91.8	94.0	100.6	94.0	98.9
1928.....					98.9	101.0	85.5	89.7	95.5	103.2	94.8	100.1
1929.....	100.3	102.5	134.6	129.4	101.7	103.7	80.6	85.7	96.0	102.7	96.7	101.5
1930.....			138.8	126.7	92.1	93.3	73.9	78.7	89.0	93.0	92.1	96.3
1931.....	82.0	79.1	106.1	91.5	82.0	77.5	68.1	66.7	76.0	76.9	84.1	82.2
1932.....	80.6	68.3	86.1	65.0	74.8	60.6	65.7	56.4	64.6	56.7	80.6	65.7
1933.....	86.7	63.8	112.7	76.8	81.0	60.7	69.2	55.2	61.6	49.1	89.3	68.7
1934.....	98.2	71.8	143.7	99.9	82.6	70.1	79.0	64.5	71.9	56.8	108.8	93.9
1935.....	96.9	74.2	155.0	118.8	83.4	72.2	79.0	66.2	74.3	58.1	92.0	83.5
1936.....	100.9	79.9	151.8	116.0	80.6	71.0	77.1	69.5	77.1	61.1	97.8	92.6
1937.....	105.7	87.5	159.4	144.8	82.2	79.1	78.0	76.2	81.5	68.0	99.2	107.2
1938.....	102.6	87.5	130.4	114.0	79.1	76.1	76.5	75.7	78.9	67.6	96.2	107.3
1938												
January.....	97.7	82.4	84.6	74.9	79.0	74.7	76.2	74.5	68.0	58.4	102.3	118.7
February.....	97.9	83.2	81.8	73.3	78.4	75.0	76.1	74.3	68.3	58.4	97.0	105.0
March.....	99.5	83.2	78.0	70.0	77.1	73.5	75.7	73.5	69.9	60.7	93.0	100.7
April.....	103.8	86.0	82.9	75.6	74.0	66.8	74.2	72.1	77.0	66.5	91.5	100.8
May.....	106.7	92.5	85.4	80.3	69.1	64.2	73.9	72.5	87.4	73.8	91.9	103.6
June.....	110.1	94.5	113.9	100.7	69.7	67.9	75.3	75.6	91.6	77.5	93.5	104.7
July.....	110.9	95.9	178.6	157.2	67.5	63.1	77.9	79.4	94.7	80.6	94.7	107.9
August.....	110.1	94.4	251.2	203.8	71.6	69.3	77.9	78.7	93.1	80.3	94.2	104.8
September.....	103.7	90.0	272.0	238.1	87.9	90.9	77.2	81.2	83.4	70.1	95.5	108.7
October.....	99.4	85.6	147.3	130.3	93.0	91.6	77.5	79.7	73.7	63.6	97.4	110.0
November.....	96.8	82.4	103.3	86.0	90.6	84.9	78.2	73.8	70.4	60.7	100.7	110.0
December.....	95.1	80.4	85.3	77.4	91.3	91.5	78.1	73.0	68.7	60.0	102.4	112.5

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued

MANUFACTURING INDUSTRIES—Continued

Year and month	Food and kindred products—Con.				Tobacco manufactures					
	Sugar, beet		Sugar refining, cane		Tobacco group		Chewing and smoking tobacco and snuff		Cigars and cigarettes	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	92.1	91.1	103.4	102.6	105.7	104.1	102.7	101.4	106.2	104.5
1924.....	100.0	100.0	98.2	100.4	98.8	99.4	102.7	101.6	98.2	99.2
1925.....	107.9	108.9	98.4	97.0	95.5	96.5	94.6	97.0	95.6	96.3
1926.....			94.8	91.5	90.9	92.1	93.1	94.0	90.4	91.8
1927.....	90.0	87.5	94.9	90.6	93.4	91.0	82.6	84.8	94.9	91.8
1928.....			89.4	87.5	90.7	86.1	75.6	77.4	92.8	87.2
1929.....	91.2	90.3	94.3	91.4	83.9	81.8	68.0	71.3	86.0	83.1
1930.....			92.3	89.7	78.3	72.7	69.8	71.3	79.4	72.9
1931.....	75.8	68.1	80.3	79.6	72.1	60.1	71.9	69.0	72.1	58.9
1932.....	90.4	68.5	73.9	66.5	65.6	48.2	71.0	62.4	64.9	46.4
1933.....	130.0	98.2	77.9	62.7	63.1	44.1	64.2	56.0	62.9	42.6
1934.....	101.3	69.7	90.7	66.8	68.1	50.6	67.1	61.0	68.2	49.3
1935.....	112.1	84.3	93.7	71.3	65.4	51.5	63.3	60.7	65.6	50.3
1936.....	105.7	87.5	91.9	71.1	65.5	54.0	61.9	61.8	65.9	53.0
1937.....	103.6	96.0	88.4	79.2	65.3	59.0	62.1	68.8	65.7	57.7
1938.....	104.2	101.7	86.4	76.7	63.8	56.8	61.4	68.6	64.1	55.3
1938										
January.....	37.9	41.9	78.1	67.0	55.7	48.0	62.8	68.7	54.8	45.4
February.....	35.2	42.9	84.9	72.9	63.2	52.6	64.4	70.3	63.0	50.3
March.....	38.8	44.2	81.5	68.4	63.8	54.7	62.0	67.4	64.0	53.0
April.....	44.1	47.6	79.7	73.9	63.4	53.2	61.8	68.3	63.6	51.3
May.....	43.5	48.3	91.0	82.5	63.8	56.6	61.0	65.8	64.2	55.4
June.....	47.4	51.5	90.5	81.4	64.8	59.4	60.6	70.4	65.3	58.0
July.....	53.2	53.1	88.1	81.3	61.5	57.1	59.8	68.8	61.7	55.6
August.....	74.7	67.7	90.1	80.1	64.3	59.0	60.4	66.1	64.8	58.0
September.....	100.2	97.3	92.7	84.8	66.3	61.0	62.6	71.8	66.8	59.6
October.....	270.3	228.4	89.0	79.3	66.3	60.7	57.7	63.3	67.4	60.3
November.....	274.8	275.3	86.6	75.4	66.9	59.8	61.9	69.1	67.5	58.5
December.....	230.7	221.9	84.4	72.9	65.2	59.6	62.1	73.0	65.6	57.9
Paper and printing										
Year and month	Paper and printing group		Boxes, paper		Paper and pulp		Printing and publishing, book and job		Printing and publishing, newspapers and periodicals	
	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls	Em- p- loy- ment	Pay rolls
1923.....	99.2	96.2	100.0	97.3	100.0	98.4	98.3	95.5	98.9	94.7
1924.....	99.7	99.5	99.5	99.7	97.3	97.5	100.7	100.0	101.0	100.6
1925.....	101.1	104.3	100.5	103.0	102.7	104.1	101.0	104.5	100.1	104.7
1926.....	104.1	110.8	102.1	106.9	105.8	109.1	104.9	112.5	101.7	110.3
1927.....	104.1	111.0	99.2	104.0	102.2	105.3	106.9	114.1	102.2	111.1
1928.....	105.0	112.3	96.3	102.0	100.8	105.3	107.4	113.6	104.5	113.6
1929.....	111.3	119.5	97.9	102.9	106.1	112.5	113.1	118.7	111.0	121.8
1930.....	108.0	114.6	90.7	91.6	102.5	104.6	110.9	115.6	109.9	119.4
1931.....	96.3	97.3	81.8	79.0	89.5	82.1	100.7	99.1	101.8	108.0
1932.....	85.5	74.8	73.5	62.4	81.9	61.4	85.3	72.4	92.9	88.6
1933.....	86.7	68.3	83.0	67.7	89.0	64.4	78.5	60.6	93.4	78.6
1934.....	97.4	80.4	93.2	83.0	102.9	78.1	88.6	71.6	99.5	87.8
1935.....	102.0	88.4	97.2	91.0	105.3	86.7	95.0	79.3	101.6	92.7
1936.....	105.8	96.3	100.2	97.5	106.8	95.6	100.0	85.5	105.5	101.4
1937.....	111.7	107.9	106.6	108.6	114.3	113.9	107.0	96.8	107.9	107.9
1938.....	104.7	100.5	96.4	98.1	104.3	100.3	100.8	89.5	105.4	106.1
1938										
January.....	106.1	100.3	93.0	87.5	105.5	96.3	105.4	95.3	105.5	105.3
February.....	106.1	101.2	93.5	92.3	106.0	101.4	104.7	93.2	105.6	105.1
March.....	105.3	101.3	94.5	94.2	105.4	101.8	102.0	91.7	105.9	106.4
April.....	104.6	99.4	93.5	91.8	104.3	98.4	100.8	88.8	106.3	106.5
May.....	103.4	98.5	92.7	92.2	102.9	97.2	99.2	87.6	105.6	106.0
June.....	101.9	96.0	92.2	90.9	101.9	94.9	96.6	84.0	104.7	104.3
July.....	101.5	95.9	92.4	93.0	101.6	96.9	97.7	85.0	102.1	101.1
August.....	102.7	98.0	94.8	97.3	102.8	101.9	99.0	86.2	102.5	101.1
September.....	104.3	101.1	98.8	105.4	104.0	101.5	98.9	88.2	105.1	106.4
October.....	105.5	103.7	102.8	112.7	104.8	106.5	99.6	87.9	106.0	108.7
November.....	107.0	103.3	105.2	110.0	105.9	102.9	101.4	89.1	107.1	109.6
December.....	108.0	107.3	103.9	109.4	106.3	103.4	103.7	96.9	108.0	113.2

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued

MANUFACTURING INDUSTRIES—Continued

Year and month	Chemicals and allied products									
	Chemicals group		Other than petroleum refining (sub-group)		Chemicals		Cottonseed—oil, cake, and meal		Druggists' preparations	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	102.9	102.2	102.9	102.1	105.7	101.8	87.8	83.9	97.7	91.8
1924.....	96.8	96.4	96.9	97.0	98.0	98.1	100.5	94.9	96.8	97.5
1925.....	100.3	101.4	100.2	100.9	96.3	100.1	111.7	121.2	105.5	110.7
1926.....	106.5	108.7	105.4	107.4	-----	-----	-----	-----	108.3	113.4
1927.....	104.2	107.8	102.8	106.8	-----	-----	127.0	151.3	110.4	119.2
1928.....	103.0	108.0	102.5	108.0	-----	-----	-----	-----	106.6	113.1
1929.....	115.7	120.9	113.6	118.4	109.2	120.0	109.0	118.9	116.4	124.4
1930.....	109.4	112.2	105.6	106.6	99.5	103.5	-----	-----	108.2	116.3
1931.....	95.4	92.0	92.7	87.7	85.1	84.2	84.5	88.5	103.2	105.3
1932.....	85.6	71.7	82.4	66.9	76.0	64.6	95.2	70.5	92.3	85.3
1933.....	97.1	76.2	94.8	72.5	93.3	75.2	98.1	57.1	94.7	86.7
1934.....	110.8	90.9	108.6	87.5	115.6	96.3	94.7	61.9	105.4	96.4
1935.....	112.5	97.4	110.8	94.2	115.5	102.2	91.1	62.8	106.5	101.4
1936.....	115.4	106.1	114.0	103.4	123.4	116.1	83.4	60.0	106.4	105.2
1937.....	125.3	130.2	124.8	127.7	136.5	146.7	96.2	79.0	114.7	120.8
1938.....	111.4	116.6	109.1	110.7	113.4	121.9	96.6	81.3	108.8	116.8
1938										
January.....	114.6	115.7	112.6	109.5	120.2	125.3	124.9	107.4	109.8	118.0
February.....	115.1	117.3	113.4	110.8	117.3	123.6	119.9	100.0	109.9	115.6
March.....	115.1	117.3	113.6	111.3	113.4	118.5	104.6	87.2	108.6	114.8
April.....	112.4	114.3	110.2	108.0	111.4	117.4	89.5	72.1	108.1	114.3
May.....	108.8	115.7	105.9	108.3	109.6	116.8	69.0	57.4	107.8	114.1
June.....	105.2	112.8	101.4	105.1	109.7	118.1	57.8	48.0	107.6	114.4
July.....	105.0	111.1	101.0	103.7	107.8	114.5	59.3	51.2	107.1	111.3
August.....	108.1	116.9	104.8	110.4	110.3	121.0	68.4	57.0	108.2	117.2
September.....	113.0	118.9	111.1	114.1	112.5	121.4	113.5	95.1	109.6	118.6
October.....	113.4	120.1	111.9	116.2	114.8	128.1	122.1	104.0	110.3	123.9
November.....	113.0	119.1	111.6	114.6	117.2	128.1	116.3	100.1	109.7	119.6
December.....	112.7	120.1	111.4	115.8	116.9	129.8	113.9	95.5	109.2	120.2

Year and month	Chemicals and allied products—Continued									
	Explosives		Fertilizers		Paints and varnishes		Rayon and allied products		Soap	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	108.5	109.5	100.5	99.1	95.6	91.6	87.3	91.3	104.9	105.7
1924.....	94.8	97.6	93.1	93.6	97.6	99.8	93.1	95.5	100.0	100.0
1925.....	96.7	92.9	106.4	107.3	106.8	108.6	119.6	113.2	95.1	94.3
1926.....	98.7	92.2	112.8	118.4	-----	-----	-----	-----	-----	-----
1927.....	98.5	97.6	100.8	106.9	117.5	123.3	164.8	141.2	82.9	100.3
1928.....	95.4	92.2	107.6	109.1	-----	-----	-----	-----	-----	-----
1929.....	95.3	102.0	113.4	108.3	122.3	129.6	244.4	220.2	88.6	96.7
1930.....	79.7	74.7	111.0	104.2	-----	-----	242.2	214.1	-----	-----
1931.....	80.4	66.9	78.8	73.4	94.4	90.3	241.9	188.4	87.4	90.2
1932.....	63.6	43.9	56.5	43.7	87.3	71.1	214.3	146.2	82.7	74.4
1933.....	70.8	49.6	70.7	44.0	95.9	73.0	276.7	190.3	88.3	71.9
1934.....	84.8	65.5	93.8	63.8	110.4	88.1	292.3	219.8	91.0	77.2
1935.....	77.6	67.7	94.6	66.3	116.0	98.8	315.7	249.8	85.9	78.0
1936.....	79.9	80.5	90.4	69.8	120.5	110.8	325.6	271.4	85.2	79.0
1937.....	88.2	99.1	103.1	92.6	128.2	129.2	356.0	344.4	95.3	93.7
1938.....	82.4	89.2	90.5	80.3	112.7	112.9	297.0	275.4	88.7	89.3
1938										
January.....	85.0	80.1	92.1	78.7	112.5	104.0	294.3	258.3	87.1	87.5
February.....	82.4	90.0	104.2	87.0	112.2	108.1	307.3	265.8	89.2	89.2
March.....	82.5	88.1	129.5	109.2	113.5	110.8	312.1	281.7	89.0	89.7
April.....	81.4	83.8	136.3	118.8	114.2	114.1	283.0	244.2	86.9	87.0
May.....	80.3	83.2	100.1	93.9	114.9	119.5	283.8	257.9	85.0	86.0
June.....	80.2	86.4	69.0	65.0	113.0	115.6	265.4	242.1	85.0	85.9
July.....	80.5	89.4	64.0	63.1	110.8	111.0	270.5	249.5	87.6	87.1
August.....	81.9	93.1	68.9	65.4	110.6	111.2	293.9	289.0	90.7	91.2
September.....	84.9	93.1	82.1	77.4	112.5	114.5	315.2	308.2	92.6	94.6
October.....	84.1	96.5	79.5	70.1	112.9	116.3	314.4	302.6	93.2	94.8
November.....	82.8	91.7	78.5	65.2	112.4	113.8	312.8	302.7	88.9	88.3
December.....	82.7	95.1	82.3	70.0	112.4	115.4	311.3	302.4	88.6	89.7

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued

MANUFACTURING INDUSTRIES—Continued

Year and month	Chemicals and allied products—Cont.		Rubber products							
	Petroleum refining		Rubber group		Rubber boots and shoes		Rubber goods, other than boots, shoes, tires, and inner tubes		Rubber tires and their inner tubes	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923.....	103.0	102.3	102.6	101.0	117.0	118.7	103.1	100.1	97.7	96.8
1924.....	96.1	94.6	91.8	92.9	83.6	82.3	91.6	92.7	94.5	95.7
1925.....	100.9	103.1	105.6	106.1	99.4	99.0	105.3	107.2	107.8	107.5
1926.....	110.8	112.7	105.1	107.0	103.0	101.7	-----	-----	105.4	107.2
1927.....	109.9	111.9	105.7	110.0	106.8	113.2	110.3	115.5	103.3	107.0
1928.....	104.7	108.3	111.1	117.5	105.0	107.1	-----	-----	109.9	116.8
1929.....	124.4	129.2	111.0	115.1	102.1	105.6	120.3	126.4	110.0	113.2
1930.....	124.9	130.4	85.9	84.7	82.0	77.4	-----	-----	79.0	79.3
1931.....	106.2	105.8	73.9	62.5	63.2	48.6	102.3	89.9	64.9	56.2
1932.....	98.7	87.5	67.6	47.4	59.6	42.4	91.3	68.1	59.8	41.2
1933.....	106.5	88.4	79.1	55.0	72.0	51.0	105.3	75.3	69.9	48.8
1934.....	119.8	101.8	88.8	69.3	77.5	58.3	116.7	89.1	80.2	65.1
1935.....	119.4	107.9	85.4	74.2	68.6	56.9	120.6	99.0	75.4	69.8
1936.....	121.3	115.0	90.4	87.5	75.2	66.1	129.0	115.2	78.5	83.1
1937.....	127.2	138.1	96.8	96.9	75.1	74.1	142.5	138.3	84.0	87.9
1938.....	120.9	136.0	75.0	69.9	56.2	50.1	116.5	107.4	63.0	61.6
1938										
January.....	122.8	135.9	77.9	66.1	59.6	48.9	112.2	95.5	68.8	60.0
February.....	121.7	138.2	74.1	58.9	56.2	43.8	112.6	97.8	63.1	49.0
March.....	121.2	136.5	72.9	60.9	55.1	44.4	111.6	99.0	61.7	51.5
April.....	121.3	134.9	72.7	61.9	54.3	42.0	112.6	99.3	61.2	53.7
May.....	120.9	139.6	71.4	63.3	52.8	43.8	110.3	97.5	60.4	56.1
June.....	121.1	137.8	70.6	63.5	53.9	45.2	106.3	93.4	60.4	57.5
July.....	121.8	135.3	68.7	64.1	42.3	36.7	106.6	95.0	60.7	60.0
August.....	121.9	138.1	72.5	69.5	54.1	50.9	113.2	107.7	60.6	60.6
September.....	121.0	134.6	75.9	76.7	58.0	57.7	121.0	116.6	61.9	67.3
October.....	119.5	132.8	77.7	79.7	60.1	61.6	123.3	122.6	63.5	69.1
November.....	118.9	133.6	82.4	85.2	63.4	60.6	133.6	130.7	66.1	75.3
December.....	118.1	134.1	83.6	89.0	65.1	65.9	134.7	133.7	67.2	79.0

NONMANUFACTURING INDUSTRIES

[1929=100]

Month and year	Anthracite mining		Bituminous-coal mining		Metalliferous mining		Quarrying and nonmetallic mining		Crude-petroleum producing	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1929.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	95.2	96.0	96.1	83.0	83.2	78.0	84.3	79.3	87.4	85.9
1931.....	84.3	76.9	88.9	61.2	59.1	44.8	67.4	53.4	65.7	61.7
1932.....	68.2	56.0	76.3	41.3	36.5	21.6	49.0	29.1	55.3	44.1
1933.....	59.5	49.0	79.9	45.4	34.6	20.6	44.9	24.7	62.2	44.1
1934.....	69.4	59.9	92.3	64.0	41.6	26.7	48.9	29.6	77.7	56.9
1935.....	64.7	52.2	94.9	70.1	47.3	33.9	46.0	30.7	74.9	57.9
1936.....	62.5	49.6	97.5	82.7	60.3	48.4	49.5	38.9	72.9	58.6
1937.....	60.2	46.9	99.3	88.5	76.8	74.0	51.4	45.4	76.5	68.2
1938.....	52.3	38.2	86.7	67.9	59.0	50.5	42.3	35.1	72.1	66.5
1938										
January.....	59.6	46.5	96.9	70.4	67.4	59.1	38.2	27.7	75.3	68.2
February.....	60.0	46.1	95.5	74.0	63.6	55.8	37.8	28.6	74.2	69.6
March.....	59.3	47.3	93.2	68.4	62.3	56.3	38.9	30.2	73.6	68.0
April.....	57.0	39.0	85.8	56.3	61.6	53.3	41.7	33.9	73.8	68.0
May.....	52.8	38.3	82.2	55.3	58.8	51.2	43.7	38.3	73.2	66.7
June.....	56.0	49.7	80.2	57.0	56.0	46.1	43.6	37.3	72.8	67.6
July.....	44.6	20.2	78.5	56.8	49.7	38.0	44.1	37.0	72.3	66.7
August.....	37.6	20.0	80.1	64.2	51.4	43.7	44.6	39.2	72.4	66.8
September.....	46.4	29.4	83.4	71.9	55.2	46.1	44.6	38.4	71.5	66.5
October.....	52.4	43.4	87.2	78.3	57.9	49.2	44.4	39.2	69.5	63.7
November.....	51.0	36.2	88.6	81.4	61.9	52.3	44.4	37.2	68.3	63.3
December.....	51.3	42.5	89.3	80.9	62.3	54.1	41.4	33.7	67.7	62.5

See footnotes at end of table.

TABLE 2.—Employment and Pay-Roll Indexes—Continued

NONMANUFACTURING INDUSTRIES—Continued

Month and year	Telephone and telegraph		Electric light and power, and manufactured gas		Electric-railroad and motorbus operation and maintenance		Wholesale trade	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1929.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	97.9	102.9	103.0	104.3	93.4	93.5	95.7	95.3
1931.....	86.6	93.7	95.6	96.7	84.7	83.4	85.8	81.9
1932.....	79.1	81.1	83.0	79.8	75.5	68.0	76.8	64.2
1933.....	70.4	68.2	78.8	72.0	70.0	58.9	76.1	56.8
1934.....	70.3	71.5	83.8	77.9	72.1	62.2	82.8	63.0
1935.....	70.1	74.5	84.8	81.4	71.2	63.7	84.0	65.6
1936.....	72.2	78.9	90.5	88.8	72.0	67.2	86.7	69.4
1937.....	77.8	89.6	95.6	99.6	73.1	70.6	92.0	76.6
1938.....	75.1	92.2	92.3	98.5	70.3	69.6	88.8	74.7
1938								
January.....	77.8	93.7	93.8	98.9	72.3	70.6	91.0	75.4
February.....	75.7	89.9	92.6	98.5	71.2	70.2	90.4	75.3
March.....	74.9	92.6	92.0	98.6	70.8	69.9	89.1	74.7
April.....	74.8	91.6	91.8	97.6	71.1	70.0	88.5	74.6
May.....	75.0	91.3	91.7	97.4	70.6	71.2	87.3	75.1
June.....	74.8	90.9	92.2	98.6	70.4	69.7	87.2	73.8
July.....	74.9	90.9	92.3	98.3	70.1	69.0	86.8	73.6
August.....	74.8	91.3	92.7	98.9	69.5	69.5	87.6	73.7
September.....	74.9	92.6	92.5	98.4	69.3	68.4	88.5	74.3
October.....	74.7	95.3	92.5	99.9	69.9	68.9	89.1	75.1
November.....	74.4	93.0	91.9	98.6	69.5	68.8	89.8	75.4
December.....	74.2	92.7	91.4	98.2	69.4	69.5	90.0	75.6

Month and year	Retail trade						Year-round hotels		Laundries		Dyeing and cleaning	
	Total retail trade		General merchandising		Other than general merchandising							
	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls	Em- ploy- ment	Pay rolls
1929.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	96.8	95.3	94.1	93.3	97.5	95.7	96.5	96.5	93.1	88.3	85.6	76.1
1931.....	87.7	83.1	92.2	87.4	86.7	82.2	86.3	81.4	85.4	70.5	79.8	59.3
1932.....	76.8	63.2	82.6	69.5	75.2	61.9	74.1	60.9	83.1	60.3	84.4	53.7
1933.....	76.1	55.2	84.2	65.4	74.0	53.1	70.1	51.0	87.9	66.0	92.7	62.6
1934.....	82.1	60.9	92.8	75.1	79.2	58.0	83.2	63.8	90.1	68.4	97.7	66.3
1935.....	82.3	62.1	94.2	78.0	79.1	58.8	87.4	68.2	95.6	75.6	104.4	71.9
1936.....	85.7	66.3	99.1	83.5	82.2	62.7	90.9	72.7	100.6	83.0	107.5	77.6
1937.....	89.8	73.1	104.3	92.5	85.9	69.1	94.9	80.6	95.7	80.6	104.5	75.3
1938.....	85.2	70.4	98.0	87.8	81.8	66.8	92.7	80.3				
1938												
January.....	84.1	70.1	91.5	84.6	82.1	67.1	94.3	81.6	96.8	80.1	96.8	65.5
February.....	82.4	68.4	88.8	81.5	80.7	65.7	94.5	83.6	95.7	79.1	95.6	65.2
March.....	83.0	68.6	90.5	82.2	81.0	65.8	93.4	80.9	94.8	78.6	98.5	68.2
April.....	88.2	72.2	101.0	89.4	84.9	68.6	93.5	80.5	95.4	80.6	111.8	87.2
May.....	83.8	70.0	92.4	84.4	81.5	67.0	93.7	80.5	96.2	80.9	109.9	80.7
June.....	83.6	69.5	91.9	84.3	81.4	66.4	92.2	79.6	96.6	81.8	110.8	83.3
July.....	81.1	68.1	87.9	80.4	79.3	65.6	90.7	77.4	97.8	83.0	108.6	77.5
August.....	80.0	66.8	86.4	78.8	78.3	64.3	90.4	77.4	97.5	83.1	105.0	74.3
September.....	84.7	69.4	97.0	85.3	81.5	66.1	91.8	78.9	98.5	81.4	107.8	81.7
October.....	85.9	70.8	99.4	88.3	82.3	67.2	92.9	80.8	94.4	79.5	106.8	78.0
November.....	86.9	71.5	104.5	91.8	82.3	67.3	92.5	81.3	93.7	79.3	102.5	73.9
December.....	98.1	79.4	144.1	122.9	86.0	70.3	91.9	81.1	93.4	80.0	97.9	68.3

¹ Includes: Iron and steel, machinery, transportation equipment, railroad repair shops, nonferrous metals, lumber and allied products, and stone, clay, and glass products.

² Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

³ Indexes for subdivisions under knit goods, namely hosiery, knitted outerwear, knitted underwear, and knitted cloth, back to January 1923, available on request.

TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

A comparison of employment and pay rolls, by States and geographic divisions, in November and December 1938 is shown in table 3 for all groups combined and for all manufacturing industries combined based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 87 manufacturing industries presented in table 1. The totals for all groups combined include all manufacturing industries, each of the nonmanufacturing industries presented in table 1 (except building construction), and seasonal hotels.

Similar comparisons showing only percentage changes are available in mimeographed form for "all groups combined," for "all manufacturing," for anthracite mining, bituminous-coal mining, metalliferous mining, quarrying and nonmetallic mining, crude-petroleum producing, public utilities, wholesale trade, retail trade, hotels, laundries, dyeing and cleaning, and brokerage and insurance.

TABLE 3.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1938 by Geographic Divisions and by States

Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll December 1938	Percentage change from November 1938	Amount of pay roll (1 week) December 1938	Percentage change from November 1938	Number of establishments	Number on pay roll December 1938	Percentage change from November 1938	Amount of pay roll (1 week) December 1938	Percentage change from November 1938
				<i>Dollars</i>					<i>Dollars</i>	
New England	13, 317	873, 943	+3.2	19, 852, 660	+5.1	3, 590	595, 898	+2.2	13, 135, 167	+6.0
Maine.....	756	51, 622	+4.6	1, 014, 878	+11.3	280	42, 884	+4.8	825, 673	+13.3
New Hampshire.....	625	39, 459	+4.0	795, 973	+11.9	211	33, 936	+3.5	685, 125	+13.1
Vermont.....	461	16, 095	+3.6	337, 461	+5.4	152	10, 135	+5.6	207, 850	+7.8
Massachusetts.....	17, 908	474, 019	+3.1	11, 003, 693	+4.1	1, 782	269, 936	+1.6	5, 984, 025	+4.8
Rhode Island.....	1, 177	96, 745	+4.6	1, 992, 137	+8.8	434	78, 854	+4.3	1, 588, 927	+10.1
Connecticut.....	2, 390	196, 003	+2.1	4, 708, 818	+3.5	731	160, 153	+1.0	3, 843, 567	+3.5
Middle Atlantic	31, 867	2, 084, 849	+3.2	54, 174, 168	+4.4	6, 459	1, 176, 250	+1.0	29, 918, 283	+3.6
New York.....	19, 773	942, 711	+4.5	25, 431, 794	+4.6	2, 566	429, 572	+1.1	11, 553, 969	+4.1
New Jersey.....	4, 376	354, 578	+1.9	9, 121, 101	+3.6	1, 607	276, 316	+7	7, 032, 278	+3.9
Pennsylvania.....	7, 718	787, 560	+2.2	19, 621, 273	+4.5	2, 286	470, 362	+3.9	11, 332, 036	+2.7
East North Central	24, 988	2, 126, 521	+3.7	57, 185, 406	+3.5	8, 512	1, 545, 427	+2.1	43, 587, 502	+3.1
Ohio.....	7, 068	548, 158	+4.7	14, 423, 925	+5.3	2, 415	388, 078	+1.7	10, 655, 932	+3.7
Indiana.....	2, 947	252, 751	+3.5	6, 366, 760	+4.9	1, 073	194, 720	+1.5	5, 116, 329	+4.8
Illinois.....	6, 850	598, 614	+2.9	15, 618, 672	+4.1	2, 449	377, 148	+1.0	9, 900, 993	+3.7
Michigan.....	3, 770	493, 478	+4.2	14, 954, 014	+1.1	1, 062	428, 673	+4.2	13, 903, 075	+1.9
Wisconsin.....	4, 553	233, 520	+2.7	5, 822, 035	+2.6	1, 513	155, 808	+1.0	4, 012, 175	+2.7

See footnotes at end of table.

TABLE 3.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1938 by Geographic Divisions and by States—Continued

(Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations)

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll December 1938	Percentage change from November 1938	Amount of pay roll (1 week) December 1938	Percentage change from November 1938	Number of establishments	Number on pay roll December 1938	Percentage change from November 1938	Amount of pay roll (1 week) December 1938	Percentage change from November 1938
				<i>Dollars</i>					<i>Dollars</i>	
West North Central.....	11,842	443,533	+2.9	10,661,489	+3.4	2,483	209,918	+2.1	5,101,310	+4.1
Minnesota.....	⁷ 2,710	<i>126,131</i>	+1.5	<i>3,291,001</i>	+2.2	<i>644</i>	<i>49,131</i>	— .3	<i>1,300,686</i>	+ .3
Iowa.....	1,986	59,863	+2.9	1,378,028	+4.3	379	32,932	+2.8	790,322	+6.5
Missouri.....	2,735	161,716	+4.5	3,795,976	+7.4	813	91,544	+4.1	2,080,258	+6.6
North Dakota.....	530	4,894	+ .6	113,281	— .2	29	447	—2.4	11,826	+3.4
South Dakota.....	456	8,132	— .6	211,640	+2.3	34	2,471	— .8	66,502	+8.4
Nebraska.....	1,076	29,472	+3.8	647,054	+2.1	138	10,279	— .1	259,616	+2.5
Kansas.....	⁸ 2,349	<i>63,325</i>	⁹ + .6	<i>1,224,609</i>	³ + .2	<i>446</i>	<i>23,114</i>	— .5	<i>592,100</i>	+1.1
South Atlantic.....	10,764	874,403	+2.8	16,646,350	+4.0	2,940	593,598	+1.2	10,444,106	+3.5
Delaware.....	249	15,146	+4.7	353,381	+8.1	83	10,308	+2.6	<i>239,255</i>	+5.6
Maryland.....	1,689	134,677	+4.6	3,192,798	+6.6	<i>651</i>	<i>88,621</i>	³ +1.2	<i>2,111,605</i>	³ +8.3
District of Columbia.....	1,008	38,801	+11.6	965,913	+9.0	40	3,435	+ .1	118,193	+3.9
Virginia.....	2,011	113,431	+1.8	2,074,933	+3.9	451	77,797	+ .7	1,404,156	+4.0
West Virginia.....	1,190	137,061	+ .5	3,377,003	— ⁽¹⁰⁾	217	50,585	+ .5	1,257,104	+2.6
North Carolina.....	1,509	175,728	+ .9	2,666,250	+2.5	674	161,558	+ .6	2,419,297	+2.6
South Carolina.....	782	91,611	+1.1	1,305,787	+2.2	252	83,788	+ .8	1,165,863	+2.2
Georgia.....	1,441	121,112	+2.9	1,910,528	+5.1	393	93,990	+1.8	1,363,674	+5.0
Florida.....	985	46,936	+11.2	799,757	+13.5	199	23,616	+7.0	365,063	+9.5
East South Central.....	4,519	297,855	+2.2	5,453,798	+2.1	1,040	182,591	+ .4	3,188,704	+2.1
Kentucky.....	1,311	83,885	+2.4	1,735,527	+1.0	288	34,812	— .2	740,272	+4.5
Tennessee.....	1,243	100,051	+1.8	1,750,028	+2.3	367	72,319	— .1	1,252,831	+1.6
Alabama.....	1,454	96,620	+2.9	1,722,262	+3.4	298	63,978	+1.9	1,041,989	+1.7
Mississippi.....	511	17,299	— .4	245,981	+ .3	87	11,482	—3.2	153,612	—1.9
West South Central.....	5,899	227,006	+2.1	4,919,942	+1.6	1,343	105,386	— .8	2,240,595	+ .8
Arkansas.....	¹¹ 1,138	<i>36,810</i>	+3.0	<i>615,938</i>	+1.4	<i>315</i>	<i>22,289</i>	— .5	<i>375,013</i>	+1.0
Louisiana.....	1,005	53,710	— .1	1,061,879	+2.0	238	30,142	—2.4	571,536	+ .9
Oklahoma.....	1,364	39,783	+1.3	965,470	+ ⁽¹⁰⁾	140	9,410	—2.5	219,345	—1.0
Texas.....	<i>2,392</i>	<i>96,703</i>	+3.3	<i>2,276,656</i>	+2.1	<i>650</i>	<i>45,646</i>	+ .6	<i>1,074,701</i>	+1.1
Mountain.....	4,181	129,932	+1.6	3,300,328	+1.3	559	38,391	—4.0	948,001	—3.7
Montana.....	658	19,624	+3.3	547,602	+5.8	76	5,403	+2.7	140,843	+7.5
Idaho.....	512	11,757	—1.6	282,602	—2.9	65	4,328	—7.4	103,171	—9.1
Wyoming.....	320	8,624	—2.2	255,143	—3.0	38	1,676	—12.3	53,135	—7.7
Colorado.....	1,255	43,775	+1.1	1,080,084	— .5	199	15,684	—4.7	391,233	—5.6
New Mexico.....	303	6,470	— .9	137,742	—1.4	30	915	—5.4	15,058	— .8
Arizona.....	405	15,412	+3.4	400,188	+4.0	40	2,734	— .9	61,889	—4.2
Utah.....	554	21,620	+4.1	515,967	+4.5	97	7,380	—4.3	174,973	—3.4
Nevada.....	174	2,650	—1.3	81,000	— .8	14	271	+ .7	7,699	+4.6
Pacific.....	10,199	448,575	+1.7	12,669,379	+1.9	2,619	218,917	—3.6	6,092,023	— .9
Washington.....	2,645	85,131	—1.0	2,213,512	—1.3	<i>554</i>	<i>46,944</i>	—4.6	1,219,135	—3.5
Oregon.....	1,292	44,869	— .7	1,155,418	— .7	307	25,257	—4.4	642,636	—2.4
California.....	¹² 6,262	<i>318,675</i>	+2.7	<i>9,300,449</i>	+3.0	<i>1,758</i>	<i>146,716</i>	—3.1	<i>4,230,252</i>	+ .2

¹ Includes banks and trust companies; construction, municipal, agricultural, and office employment; amusement and recreation; professional services; and trucking and handling.² Includes laundering and cleaning; and water, light, and power.³ Weighted percentage change.⁴ Includes automobile and miscellaneous services; restaurants; and building and contracting.⁵ Includes construction but not public works.⁶ Does not include logging.⁷ Includes banks; real estate; pipe-line transportation; trucking and transfers; railroads (other than repair shops); motor transportation (other than operation and maintenance); water transportation; hospitals and clinics; personal, business, mechanical repair, and miscellaneous services; and building construction.⁸ Includes financial institutions, miscellaneous services, and restaurants.⁹ Weighted percentage change including hired farm labor.¹⁰ Less than 1/10 of 1 percent.¹¹ Includes automobile dealers and garages; and sand, gravel, and building stone.¹² Includes banks, insurance, and office employment.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in November and December 1938 is made in table 4 for 13 metropolitan areas which had a population of 500,000 or over in 1930. Cities within these areas, but having a population of 100,000 or over, are not included. Data concerning them are presented in a supplementary tabulation which is available on request.

Footnotes to the table indicate which cities are excluded. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table 1, with the exception of building construction, and include also miscellaneous industries.

Revisions made in the figures after they have gone to press, chiefly because of late reports by cooperating firms, are incorporated in the supplementary tabulation mentioned above. This supplementary tabulation covers these 13 metropolitan areas as well as other metropolitan areas and cities having a population of 100,000 or more according to the 1930 Census of Population.

TABLE 4.—*Comparison of Employment and Pay Rolls in Identical Establishments in November, December 1938 by Principal Metropolitan Areas*

Metropolitan area	Number of establishments	Number on pay roll December	Percentage change from November	Amount of pay roll (1 week) December	Percentage change from November
New York, N. Y. ¹	14,306	635,495	+5.1	\$16,844,971	+6.4
Chicago, Ill. ²	4,456	429,575	+3.4	11,724,705	+5.1
Philadelphia, Pa. ³	2,098	202,090	+4.2	5,420,342	+5.3
Detroit, Mich.....	1,572	311,583	+5.2	10,190,947	+3.1
Los Angeles, Calif. ⁴	2,979	159,821	+4.6	4,652,867	+5.2
Cleveland, Ohio.....	1,649	125,716	+7.1	3,326,435	+6.0
St. Louis, Mo.....	1,441	121,753	+4.4	2,955,864	+7.1
Baltimore, Md.....	1,126	100,441	+4.8	2,389,265	+5.8
Boston, Mass. ⁵	1,452	102,312	+3.1	2,664,382	+4.0
Pittsburgh, Pa.....	1,104	164,806	+2.0	4,312,780	+1.6
San Francisco, Calif. ⁶	1,670	84,053	+3.3	2,511,414	+3.9
Buffalo, N. Y.....	860	69,413	+3.7	1,816,826	+2.5
Milwaukee, Wis.....	1,112	98,433	+6.0	2,626,350	+3.8

¹ Does not include Elizabeth, Jersey City, Newark, or Paterson, N. J., nor Yonkers, N. Y.

² Does not include Gary, Ind.

³ Does not include Camden, N. J.

⁴ Does not include Long Beach, Calif.

⁵ Figures relate to city of Boston only.

⁶ Does not include Oakland, Calif.

Retail Prices

RETAIL PRICES OF FOOD IN JANUARY 1939 ¹

Summary

THE retail cost of food was 1.4 percent lower in January than in December, due almost entirely to greater than seasonal price decreases of 22.1 percent for eggs and of 6.0 percent for butter.

The January index for all foods was 77.5 percent of the 1923-25 average. It was 3.5 percent lower than in January 1938 when the index stood at 80.3. The cost of 7 of the 8 commodity groups showed decreases for the year ranging from 1.0 percent for meats to 7.7 percent for fats and oils. Fruit and vegetable costs advanced 3.8 percent as a result of an average increase of 5.7 percent for fresh items.

The index for January 1939 was 23.8 percent above the level of January 1933 when the index was 62.6, and 24.6 percent lower than in January 1929 when the index was 102.7.

Details by Commodity Groups

The cost of cereals and bakery products, which had tended downward since the summer of 1937, decreased 0.5 percent between December and January. Prices were lower for 10 of the 13 items included in the group. The price of flour showed a decrease of 0.5 percent for the month and was 14.8 percent below the level of January 1938. Further reductions in prices of white bread resulted in an average decrease of 0.4 percent for the month and of 8.4 percent for the 12-month period. The greatest decreases in the group for the month were 1.3 percent for hominy grits and 1.2 percent for macaroni.

Meat costs turned upward with an increase of 0.2 percent. Advances were reported of 0.5 percent for beef, the most important subgroup, and of 0.8 percent for lamb. The price of roasting chickens rose 3.7 percent. A decrease of 1.7 percent in the cost of pork products continued the seasonal decline begun in October 1938. Lower prices for pork items as reported for the month, ranged from 0.6 percent for sliced ham to 3.2 percent for loin roast. The price of veal cutlets decreased 0.1 percent. The cost of canned salmon showed no change.

¹ Annual figures for prices of food and coal for 1938 were not available for this issue, but these reports will be furnished on request.

A drop of 1.5 percent in the cost of dairy products reflected a greater than seasonal decline of 6.0 percent in the price of butter. Lower prices for butter were reported for 48 cities. The price of fresh milk advanced 0.6 percent as a result of increases of 0.9 cent per quart in Boston and 0.3 cent per quart in Los Angeles. Other items in the group showed little or no change.

The cost of eggs showed a sharp decline of 22.1 percent and reached the lowest January level since 1934. Lower prices, as compared with December, were reported for each of the 51 cities, and decreases for all regions were markedly greater than for the corresponding period of 1938.

The average cost of fruits and vegetables, which advanced 2.5 percent between December and January, reflected price increases for 9 of the 13 fresh items. An advance of 8.8 percent was reported for potatoes and cabbage, and increases for other items ranged from 0.7 percent for apples to 13.3 percent for spinach. Prices for oranges decreased 4.9 percent and lettuce and carrots were 10.6 and 3.0 percent lower, respectively. The average cost for canned products declined 0.2 percent. Price reductions were reported for 7 items and advances for 3. None of the changes amounted to as much as 1.0 percent. The cost for dried products averaged 0.8 percent lower than in December. Prices declined 1.3 percent for navy beans, 0.8 percent for prunes and lima beans, and 0.7 percent for raisins. Slight increases were reported for dried peaches and black-eyed peas.

There was no change for the month in the average cost of beverages and chocolate. An upturn of 0.4 percent in the price of coffee offset decreases of 0.6 percent for tea and 0.3 percent for cocoa and chocolate.

The cost for fats and oils declined 1.4 percent, largely as a result of continued decreases in prices of lard and of shortening sold in cartons. These decreases amounted to 3.3 and 2.6 percent, respectively. Slightly lower prices were shown for other items in the group.

A decrease of 0.4 percent in the cost of sugar and sweets brought the index for the group 5.8 percent below the level of January 1938. Prices of sugar declined 0.4 percent and strawberry preserves 1.0 percent between December and January. Other items showed little or no change.

Indexes of retail costs of food for January 1939 and December 1938, together with indexes for January 1938, 1933, and 1929 are shown in table 1. The chart on page 744 shows the trend in the cost of all foods and of each major commodity group for the period from January 1929 to January 1939, inclusive.

TABLE
Gro

All food

Cereals
Meats
Dairy
Eggs
Fruits

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TABLE 1.—*Indexes of Retail Food Costs in 51 Large Cities Combined,¹ by Commodity Groups, January 1939 and December 1938 and January 1938, 1933, and 1929*

[1923-25=100]

Commodity group	1939 Jan. 17 ²	1938		1933 Jan. 15	1929 Jan. 15
		Dec. 13	Jan. 18		
All foods.....	77.5	78.6	80.3	62.6	102.7
Cereals and bakery products.....	86.1	86.5	93.2	69.5	98.4
Meats.....	92.9	92.7	93.8	64.8	117.6
Dairy products.....	77.9	79.1	83.9	63.4	105.1
Eggs.....	65.9	84.5	70.1	66.9	105.0
Fruits and vegetables.....	61.1	59.6	58.8	52.3	88.2
Fresh.....	60.0	58.2	56.8	51.4	86.6
Canned.....	74.4	74.5	79.8	66.4	96.0
Dried.....	56.8	57.3	61.3	48.6	98.2
Beverages and chocolate.....	66.3	66.3	68.3	71.1	110.7
Fats and oils.....	64.8	65.8	70.2	46.9	94.1
Sugar and sweets.....	62.3	62.6	66.2	58.3	76.7

¹ Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined with the use of population weights.

² Preliminary.

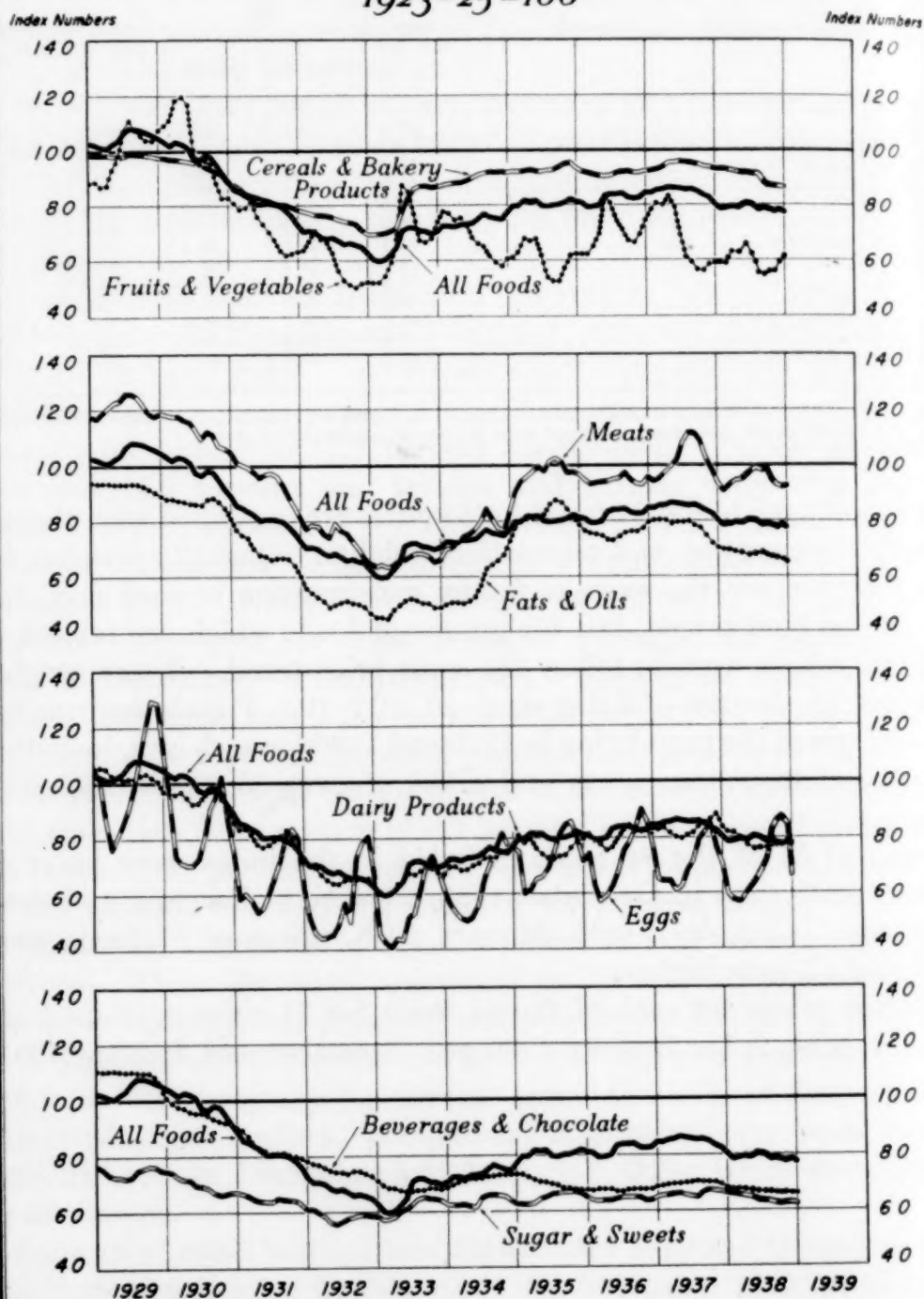
Prices of each of the 84 foods for 51 cities are combined with the use of both consumption and population weights. Quantity weights for each food include the average family consumption in each city, not only of the food priced, but for groups of foods which are related in kind and which seem to follow the same price trend. These weights are based on the cost of living study of 1917-19. Population weights are averages of the population in 1920 and 1930 for each city, including adjacent metropolitan areas and cities of over 50,000 in the same region.

Prices of 51 of the 84 foods included in the index were lower in January 1939 than in December 1938, 29 were higher, and 4 showed no change. Compared with January 1938, prices of 67 foods were lower and 17 were higher.

Average prices for each of the 84 foods for 51 cities combined are shown in table 2, for January 1939 and December and January 1938.

RETAIL COST OF FOOD

1923-25=100



UNITED STATES BUREAU OF LABOR STATISTICS

TABLE 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined, January 1939 and December and January 1938

[*Indicates the foods included in indexes prior to Jan. 1, 1935]

Article	1939	1938	
	Jan. 17 ¹	Dec. 13	Jan. 18
Cereals and bakery products:			
Cereals:	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
*Flour, wheat.....pound	3.6	3.7	4.3
*Macaroni.....do	14.4	14.6	14.9
*Wheat cereal.....28-oz. package	24.4	24.4	24.4
*Corn flakes.....8-oz. package	7.3	7.3	7.6
*Corn meal.....pound	4.6	4.6	4.8
Hominy grits.....24-oz. package	8.5	8.6	9.2
*Rice.....pound	7.6	7.6	8.0
*Rolled oats.....do	7.1	7.1	7.2
Bakery products:			
*Bread, white.....do	8.1	8.2	8.9
Bread, whole-wheat.....do	9.3	9.3	9.8
Bread, rye.....do	9.4	9.5	10.0
Cake.....do	24.9	25.0	24.8
Soda crackers.....do	15.3	15.4	16.5
Meats:			
Beef:			
*Sirloin steak.....do	38.8	38.4	36.2
*Round steak.....do	35.4	35.1	32.8
*Rib roast.....do	30.0	29.9	29.1
*Chuck roast.....do	23.6	23.4	22.4
*Plate.....do	15.9	15.9	15.6
Liver.....do	25.5	25.5	24.4
Veal:			
Cutlets.....do	42.6	42.7	43.8
Pork:			
*Chops.....do	28.6	29.4	29.3
Loin roast.....do	22.7	23.4	23.7
*Bacon, sliced.....do	34.9	35.3	38.4
Bacon, strip.....do	29.4	29.7	32.1
*Ham, sliced.....do	46.8	47.0	45.4
Ham, whole.....do	28.2	28.2	28.2
Salt pork.....do	19.5	20.1	21.7
Lamb:			
Breast.....do	12.6	12.7	13.3
Chuck.....do	21.5	22.0	22.8
*Leg.....do	28.1	27.4	28.4
Rib chops.....do	35.4	35.0	36.0
Poultry:			
*Roasting chickens.....do	30.9	29.8	35.9
Fish:			
Salmon, pink.....16-oz. can	12.5	12.5	14.2
*Salmon, red.....do	23.4	23.5	27.0
Dairy products:			
*Butter.....pound	33.5	35.6	40.4
*Cheese.....do	25.2	25.1	29.0
Cream..... $\frac{1}{2}$ pint	14.6	14.6	15.0
Milk, fresh (delivered and store).....quart	12.3	12.3	12.5
*Milk fresh (delivered).....do	12.7	12.6	12.7
Milk, fresh (store).....do	11.6	11.5	11.9
*Milk, evaporated.....14 $\frac{1}{2}$ -oz. can	6.9	6.9	7.5
*Eggs.....dozen	33.6	43.2	35.8
Fruits and vegetables:			
Fresh:			
Apples.....pound	5.2	5.2	4.5
*Bananas.....do	6.3	6.2	6.3
Lemons.....dozen	24.4	24.5	32.9
*Oranges.....do	24.8	26.0	25.0
Beans, green.....pound	11.0	10.4	14.4
*Cabbage.....do	3.3	3.0	4.4
Carrots.....bunch	6.0	6.2	5.6
Celery.....stalk	8.5	8.2	8.8
Lettuce.....head	8.2	9.2	7.5
*Onions.....pound	4.0	3.9	4.8
*Potatoes.....do	2.4	2.2	2.0
Spinach.....do	7.6	6.7	8.5
Sweetpotatoes.....do	3.9	3.7	3.8
Canned:			
Peaches.....No. 2 $\frac{1}{2}$ can	16.9	17.0	19.5
Pears.....do	20.5	20.6	21.6
Pineapple.....do	21.4	21.4	23.1
Asparagus.....No. 2 can	28.0	28.2	30.2
Beans, green.....do	10.6	10.6	11.5

¹ Preliminary.

TABLE 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined, January 1939 and December and January 1938—Continued

Article	1939	1938	
	Jan. 17	Dec. 13	Jan. 18
Fruits and vegetables—Continued.			
Canned—Continued.			
*Beans with pork.....16-oz. can.....	Cents 7.3	Cents 7.3	Cents 7.6
*Corn.....No. 2 can.....	10.9	11.0	12.0
*Peas.....do.....	14.1	14.2	15.9
*Tomatoes.....do.....	8.6	8.6	9.0
Tomato soup.....10½-oz. can.....	7.4	7.4	7.4
Dried:			
Peaches.....pound.....	14.8	14.8	15.8
*Prunes.....do.....	9.1	9.2	9.6
*Raisins.....15-oz. package.....	9.4	9.4	10.1
Black-eyed peas.....pound.....	7.7	7.6	8.1
Lima beans.....do.....	8.9	9.0	9.4
*Navy beans.....do.....	5.9	6.0	6.6
Beverages and chocolate:			
*Coffee.....do.....	22.9	22.8	24.2
*Tea.....¼ pound.....	17.7	17.8	17.6
Cocoa.....8-oz. can.....	8.5	8.5	9.1
Chocolate.....8-oz. package.....	16.1	16.2	16.1
Fats and oils:			
*Lard.....pound.....	11.6	11.9	13.8
Shortening, other than lard:			
In cartons.....do.....	12.8	13.2	13.4
In other containers.....do.....	20.5	20.5	19.9
Salad oil.....pint.....	24.4	24.5	25.0
Mayonnaise.....½ pint.....	17.3	17.3	17.5
*Oleomargarine.....pound.....	16.6	16.8	17.5
Peanut butter.....do.....	18.2	18.3	18.8
Sugar and sweets:			
*Sugar.....do.....	5.2	5.2	5.5
Corn sirup.....24-oz. can.....	13.8	13.8	14.2
Molasses.....18-oz. can.....	13.6	13.6	14.1
Strawberry preserves.....pound.....	20.9	21.1	22.2

Details by Regions and Cities

Lower food costs for January as compared with December were reported for 50 of the 51 cities included in the composite index. These decreases resulted in an average decline of 1.4 percent for all cities combined. The greatest reductions occurred in Dallas where the cost dropped 5.0 percent, and in the cities of the Mountain area where decreases of 4.0 for Salt Lake City, 3.0 percent for Denver, and 2.7 percent for Butte were recorded. In each of these cities, egg costs declined more than 25.0 percent. In Dallas and Salt Lake City costs for fresh fruits and vegetables dropped sharply, contrary to the general movement. Reductions in prices of white bread, averaging 0.8 cent per pound for Dallas and 0.5 cent per pound for Denver, contributed to the declines for these cities. The only advance in food costs, 0.1 percent, was reported for St. Louis. Increases in costs of meats and of fresh fruits and vegetables for this city were much greater than the averages for the 51 cities combined.

Indexes of retail food costs by regions and cities are given in table 3 for January 1939 and December and January 1938.

TABLE 3.—Indexes of the Average Retail Cost of All Foods, by Regions and Cities,¹
January 1939, and December and January 1938

[1923-25 = 100]

Region and city	1939	1938		Region and city	1939	1938	
	Jan. 17 ²	Dec. 13	Jan. 18		Jan. 17 ²	Dec. 13	Jan. 18
United States.....	77.5	78.6	80.3	West North Central—Con.			
New England.....	75.7	76.4	78.3	St. Louis.....	82.8	82.7	84.6
Boston.....	74.2	74.5	76.7	St. Paul.....	78.8	79.5	82.0
Bridgeport.....	79.8	81.1	83.4	South Atlantic.....	76.7	77.5	79.2
Fall River.....	79.0	79.8	81.9	Atlanta.....	72.2	73.1	73.7
Manchester.....	79.0	80.0	80.0	Baltimore.....	82.5	83.1	84.7
New Haven.....	79.0	80.7	82.0	Charleston, S. C.....	78.0	79.9	80.6
Portland, Maine.....	76.7	76.8	78.7	Jacksonville.....	75.4	76.5	78.4
Providence.....	74.8	75.4	77.1	Norfolk.....	75.1	75.5	79.2
Middle Atlantic.....	78.6	79.9	81.0	Richmond.....	70.5	71.4	74.4
Buffalo.....	76.8	78.7	80.4	Savannah.....	75.8	77.8	79.5
Newark.....	80.8	82.0	82.9	Washington, D. C.....	79.4	80.2	80.9
New York.....	80.3	81.9	81.9	East South Central.....	70.9	72.2	75.5
Philadelphia.....	78.0	78.4	81.8	Birmingham.....	65.7	67.5	71.3
Pittsburgh.....	76.3	78.0	79.3	Louisville.....	81.5	81.8	84.8
Rochester.....	77.4	78.2	79.8	Memphis.....	72.9	74.3	76.9
Seranton.....	73.7	75.0	75.4	Mobile.....	73.1	74.0	75.1
East North Central.....	77.6	78.4	80.9	West South Central.....	75.9	77.6	78.8
Chicago.....	78.3	78.8	81.8	Dallas.....	70.5	74.2	75.7
Cincinnati.....	77.9	78.4	81.7	Houston.....	77.1	77.9	78.8
Cleveland.....	79.3	80.8	80.2	Little Rock.....	72.0	73.0	76.5
Columbus, Ohio.....	75.7	76.5	79.3	New Orleans.....	82.7	82.8	83.7
Detroit.....	75.7	76.7	80.5	Mountain.....	77.7	80.4	83.4
Indianapolis.....	77.2	77.9	79.7	Butte.....	73.6	75.6	77.8
Milwaukee.....	79.8	80.9	84.2	Denver.....	80.1	82.6	86.1
Peoria.....	78.3	79.1	80.5	Salt Lake City.....	74.5	77.7	80.0
Springfield, Ill.....	75.6	77.6	77.8	Pacific.....	76.4	77.7	78.6
West North Central.....	79.7	80.7	82.3	Los Angeles.....	71.8	73.7	74.0
Kansas City.....	78.1	79.8	80.8	Portland, Oreg.....	78.7	79.8	80.9
Minneapolis.....	82.4	83.4	85.5	San Francisco.....	80.8	81.9	83.1
Omaha.....	73.7	75.4	76.5	Seattle.....	77.8	78.5	80.1

¹ Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined for regions and for the United States with the use of population weights.

² Preliminary.

Wholesale Prices

WHOLESALE PRICES IN JANUARY 1939 ¹

THE downswing in wholesale commodity prices, which began in October, continued through January, when the Bureau of Labor Statistics index of 813 price series dropped 0.1 percent to the lowest level reached in the past 4 years. The decline placed the January index at 76.9 percent of the 1926 average and represents a decrease of 4.9 percent when compared with January a year ago.

Half of the 10 major group classifications declined during the month. Foods registered the greatest decrease, 2.2 percent. House-furnishing goods dropped 0.7 percent; farm products, 0.6 percent; fuel and lighting materials, 0.5 percent; and metals and metal products, 0.2 percent. The textile products group advanced 0.2 percent, and building materials and miscellaneous commodities rose 0.1 percent. Hides and leather products and chemicals and drugs remained unchanged at the December level.

The index for each group is below its January 1938 plane. The decreases range from 2.3 percent for metals and metal products to 7.0 percent for fuel and lighting materials.

The January index for the raw materials group remained unchanged from December, 70.9 percent of the 1926 average. It is 5.3 percent lower than it was a year ago. Average wholesale prices of semi-manufactured commodities declined 0.4 percent during the month and are 2.6 percent lower than they were at this time last year. Finished product prices declined 0.2 percent and are 5.1 percent below their January 1938 average.

According to the index for "All commodities other than farm products," prices for nonagricultural commodities dropped 0.1 percent during the month and are 4.7 percent lower than they were a year ago. The index for "All commodities other than farm products and foods," marking the movement in prices of industrial commodities, fell 0.1 percent to a point 4.0 percent below a year ago.

Average prices of food in the wholesale markets of the country declined 2.2 percent to the lowest point since July 1934. Decreases of 8.1 percent in the subgroup "Other foods," 2.8 percent for dairy products, and 2.1 percent for cereal products, largely accounted for the decline. Prices were lower for butter, cheese, bread (New York)

¹ More detailed information on wholesale prices is given in the Wholesale Price pamphlet and will be furnished upon request.

hominy grits, prunes, canned corn, cocoa beans, pepper, granulated sugar, edible tallow, and vegetable oil. Wholesale prices of meats advanced 2.1 percent, and fruits and vegetables rose 0.8 percent. Higher prices were reported for fresh pork, mutton, veal, dressed poultry, oatmeal, rye flour, dried apples, and bananas. The current food index, 71.5, is 6.3 percent below the January 1938 level.

The farm products group index fell 0.6 percent because of sharp price declines in eggs, lemons, oranges, and fresh milk (Chicago). The livestock and poultry subgroup advanced 4.8 percent and grains rose 3.5 percent. Quotations were higher for barley, oats, rye, wheat, calves, cows, hogs, live poultry, hay, beans, potatoes, and peanuts. The January farm products index, 67.2, is 6.1 percent lower than it was a year ago.

A seasonal decline in prices of gas, together with lower prices for bituminous coal and Oklahoma gasoline, caused the fuel and lighting materials group index to decrease 0.5 percent. Average prices for anthracite were fractionally higher and coke remained unchanged.

The index for the housefurnishing goods group dropped 0.7 percent to the lowest level of the past 2 years. Weakening prices for kitchen furniture and window shades were responsible for the decline. Prices for linoleum floor covering averaged higher.

Lower prices for agricultural implements, iron and steel items such as ferromanganese, tin cans, and wood screws, and yellow brass rods, caused the metals and metal products group index to decline 0.2 percent. No changes were reported in prices of motor vehicles and plumbing and heating fixtures.

A minor advance, 0.2 percent, was registered in the textile products group index because of higher prices for raw silk, silk yarns, burlap, raw jute, and jute yarns. Lower prices were reported for print cloth, drillings, sheetings, cotton flannel, worsted yarns, manila and sisal rope, binder twine, handkerchiefs, silk hosiery, and cotton underwear.

Wholesale prices of building materials, principally concrete building blocks; cypress, gum, and Ponderosa pine lumber; tung oil; turpentine; and prepared roofing, resulted in an advance of 0.1 percent in the building materials group index. Average prices for cement and structural steel were steady.

Average wholesale prices of cattle feed advanced 4.3 percent and paper and pulp rose 0.1 percent during January. Crude rubber declined 1.5 percent and soap prices averaged 0.2 percent lower.

In the hides and leather products group, higher prices for shoes and skins were offset by lower prices for hides, sole leather, and luggage, and the group index remained unchanged at 93.1 percent of the 1926 average.

The index for the chemicals and drugs group remained unchanged at the December level. Fertilizer-material prices rose 2.3 percent

and mixed fertilizers advanced 1.4 percent. A decline of 0.7 percent was registered for drugs and pharmaceuticals, and chemicals decreased 0.4 percent.

Index numbers for the groups and subgroups of commodities for January 1939 and December and January 1938 are shown in table 1.

TABLE 1.—*Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities*
[1926=100]

Group and subgroup	January 1939	December 1938	January 1938	Group and subgroup	January 1939	December 1938	January 1938
All commodities	76.9	77.0	80.9	Metals and metal products—			
Farm products	67.2	67.6	71.6	Continued.			
Grains.....	56.3	54.4	75.0	Iron and steel.....	96.4	96.8	99.6
Livestock and poultry.....	78.0	74.4	78.5	Motor vehicles ¹	93.4	93.4	95.6
Other farm products.....	63.2	66.5	66.1	Nonferrous metals.....	76.7	76.8	75.0
Foods	71.5	73.1	76.3	Plumbing and heating.....	78.7	78.7	79.6
Dairy products.....	71.8	73.9	83.3	Building materials	89.5	89.4	91.8
Cereal products.....	73.2	74.8	83.0	Brick and tile.....	92.4	91.5	91.8
Fruits and vegetables.....	60.9	60.4	56.7	Cement.....	95.5	95.5	95.5
Meats.....	81.6	79.9	82.6	Lumber.....	91.7	90.9	92.6
Other foods.....	63.6	69.2	69.5	Paint and paint materials.....	81.0	81.0	80.1
Hides and leather products	93.1	93.1	96.7	Plumbing and heating.....	78.7	78.7	79.6
Shoes.....	101.2	100.6	104.7	Structural steel.....	107.3	107.3	114.9
Hides and skins.....	78.4	78.8	82.3	Other building materials.....	89.6	89.7	95.8
Leather.....	86.0	85.9	86.6	Chemicals and drugs	76.7	76.7	79.6
Other leather products.....	95.3	95.8	102.4	Chemicals.....	79.7	80.0	84.1
Textile products	65.9	65.8	69.7	Drugs and pharmaceuticals.....	73.0	73.5	74.0
Clothing.....	81.5	81.6	86.3	Fertilizer materials.....	70.2	68.6	72.1
Cotton goods.....	64.3	64.6	68.2	Mixed fertilizers.....	74.8	73.8	73.4
Hosiery and underwear.....	59.1	59.3	63.0	Housefurnishing goods	85.4	86.0	88.3
Silk and rayon.....	32.1	30.8	28.9	Furnishings.....	90.1	90.3	92.8
Woolen and worsted goods.....	74.5	74.8	83.8	Furniture.....	80.5	81.6	83.7
Other textile products.....	64.4	64.4	67.7	Miscellaneous	73.2	73.1	75.2
Fuel and lighting materials	72.8	73.2	78.3	Automobile tires and tubes.....	58.8	58.8	57.4
Anthracite.....	80.3	80.1	80.1	Cattle feed.....	79.9	76.6	91.6
Bituminous coal.....	98.3	98.5	103.2	Paper and pulp.....	81.0	80.9	90.0
Coke.....	104.2	104.2	105.5	Rubber, crude.....	33.4	33.9	30.5
Electricity.....	(1)	(1)	89.1	Other miscellaneous.....	81.1	81.1	82.4
Gas.....	(1)	81.6	81.8	Raw materials	70.9	70.9	74.9
Petroleum products.....	50.4	50.9	58.8	Semimanufactured articles	74.9	75.2	76.9
Metals and metal products	94.4	94.6	96.6	Finished products	80.0	80.2	84.3
Agricultural implements.....	93.4	93.5	96.2	All commodities other than			
Farm machinery.....	94.6	94.8	97.7	farm products.....	78.9	79.0	82.8
				All commodities other than			
				farm products and foods.....	80.2	80.3	83.5

¹ Data not available.

² Preliminary revision.

Index Numbers by Commodity Groups, 1926 to January 1939

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1938, inclusive, and by months from January 1938 to January 1939, inclusive, are shown in table 2.

TABLE 2.—Index Numbers of Wholesale Prices, by Groups of Commodities

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
By years:											
1926.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929.....	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1932.....	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1933.....	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.6	75.8	62.5	65.9
1936.....	80.9	82.1	95.4	71.5	76.2	87.0	86.7	80.4	81.7	70.5	80.8
1937.....	86.4	85.5	104.6	76.3	77.6	95.7	95.2	83.9	89.7	77.8	86.3
1938.....	68.5	73.6	92.8	66.7	76.5	95.7	90.3	77.6	86.8	73.3	78.6
By months:											
1938:											
January.....	71.6	76.3	96.7	69.7	78.3	96.6	91.8	79.6	88.3	75.2	80.9
February.....	69.8	73.5	94.7	68.6	78.5	96.0	91.1	79.1	88.0	74.8	79.8
March.....	70.3	73.5	93.6	68.2	77.7	96.0	91.5	78.7	87.7	74.4	79.7
April.....	68.4	72.3	92.1	67.2	76.8	96.3	91.2	77.5	87.3	73.4	78.7
May.....	67.5	72.1	91.3	66.1	76.2	96.7	90.4	76.8	87.2	73.1	78.1
June.....	68.7	73.1	90.1	65.5	76.4	96.1	89.7	76.3	87.1	72.9	78.3
July.....	69.4	74.3	91.5	66.1	76.8	95.2	89.2	77.7	86.4	72.7	78.8
August.....	67.3	73.0	91.9	65.9	76.8	95.4	89.4	77.7	86.4	72.4	78.1
September.....	68.1	74.5	92.0	65.8	76.6	95.5	89.5	77.3	86.2	72.4	78.3
October.....	66.8	73.5	93.4	66.2	75.4	95.3	89.8	77.1	85.7	72.6	77.6
November.....	67.8	74.1	94.6	66.2	73.7	94.9	89.2	76.6	85.8	73.0	77.5
December.....	67.6	73.1	93.1	65.8	73.2	94.6	89.4	76.7	86.0	73.1	77.0
1939:											
January.....	67.2	71.5	93.1	65.9	72.8	94.4	89.5	76.7	85.4	73.2	76.9

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, finished products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Finished products" was given in the December 1938 issue of the Wholesale Price pamphlet.

TABLE 3.—Index Numbers of Wholesale Prices, by Special Groups of Commodities

[1926=100]

Year and month	Raw materials	Semi-manufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods
By years:					
1926.....	100.0	100.0	100.0	100.0	100.0
1929.....	97.5	93.9	94.5	93.3	91.6
1932.....	55.1	59.3	70.3	68.3	70.2
1933.....	56.5	65.4	70.5	69.0	71.2
1936.....	79.9	75.9	82.0	80.7	79.6
1937.....	84.8	85.3	87.2	86.2	85.3
1938.....	72.0	75.4	82.2	80.6	81.7
By months:					
1938:					
January.....	74.9	76.9	84.3	82.8	83.5
February.....	73.6	76.1	83.3	81.9	83.0
March.....	73.2	75.6	83.4	81.6	82.6
April.....	71.3	75.3	82.7	80.8	82.0
Year and month	Raw materials	Semi-manufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods
By months—Con.					
1938:					
May.....	70.7	75.4	82.1	80.3	81.6
June.....	71.4	74.1	82.2	80.3	81.3
July.....	72.3	74.3	82.5	80.8	81.4
August.....	71.4	74.4	81.8	80.3	81.4
September.....	72.0	74.7	81.8	80.4	81.3
October.....	70.9	75.9	81.1	79.9	81.1
November.....	71.5	76.2	80.5	79.5	80.6
December.....	70.9	75.2	80.2	79.0	80.3
1939:					
January.....	70.9	74.9	80.0	78.9	80.2

Weekly Fluctuations

Weekly fluctuations in the major commodity group classifications during December and January are shown by the index numbers in table 4.

TABLE 4.—*Weekly Index Numbers of Wholesale Prices by Commodity Groups, January 1939 and December 1938*

[1926=100]

Commodity group	Jan. 28, 1939	Jan. 21, 1939	Jan. 14, 1939	Jan. 7, 1939	Dec. 31, 1938	Dec. 24, 1938	Dec. 17, 1938	Dec. 10, 1938	Dec. 3, 1938
All commodities.....	76.7	76.6	76.8	77.0	76.9	76.6	76.7	77.1	77.4
Farm products.....	67.3	66.9	67.3	67.6	68.3	67.2	67.4	67.8	69.1
Foods.....	71.2	71.3	71.3	72.6	72.5	72.2	72.6	73.7	74.3
Hides and leather products.....	93.3	93.8	94.1	93.9	93.6	93.8	93.8	93.4	94.4
Textile products.....	65.6	65.4	65.3	65.3	65.3	65.2	65.2	65.4	65.6
Fuel and lighting materials.....	73.4	73.6	73.7	73.8	73.7	73.8	74.1	74.4	74.3
Metals and metal products.....	94.5	94.5	94.6	94.6	94.8	94.8	94.8	94.8	95.0
Building materials.....	89.4	89.1	89.7	90.0	89.2	89.3	89.2	89.1	89.3
Chemicals and drugs.....	76.1	76.3	76.4	76.3	76.3	76.4	76.3	76.3	76.3
Housefurnishing goods.....	87.2	87.2	87.2	87.5	87.6	87.6	87.6	87.6	87.7
Miscellaneous.....	73.0	73.0	73.1	73.1	73.0	72.9	72.9	72.8	72.4
Raw materials.....	70.7	70.4	70.8	71.1	71.0	70.3	70.4	71.2	72.0
Semimanufactured articles.....	74.7	74.8	75.0	75.0	75.0	75.1	74.9	75.1	75.9
Finished products.....	80.2	80.3	80.3	80.5	80.4	80.2	80.4	80.6	80.7
All commodities other than farm products.....	78.8	78.8	78.9	79.1	78.9	78.7	78.8	79.2	79.3
All commodities other than farm products and foods.....	80.4	80.4	80.5	80.6	80.5	80.5	80.6	80.7	80.7

Recent Publications of Labor Interest

FEBRUARY 1939

Consumer Problems

Income and consumption. By Roland S. Vaile and Helen G. Canoyer. New York, Henry Holt & Co., 1938. xv, 394 pp., charts; bibliography. (American General Education Series.)

The authors set for themselves the task of answering three questions: Of what do income and consumption consist for a nation and for its individuals? How do present production and distribution of income agree with various ideals or standards of consumption? What can we do, either individually or in groups, that will improve the condition of the consumer? Discussion of the third question includes a suggested Federal Department of the Consumer.

Who gets your food dollar? By Hector Lazo and M. H. Bletz. New York, Harper & Bros., 1938. 129 pp., charts; bibliography.
Reviewed in this issue.

Cost and Standards of Living

The expenditure of the unemployed. By Elizabeth W. Gilboy. (In American Sociological Review, Pittsburgh, Pa., December 1938, pp. 801-814.)

The Cambridge, Mass., sample covered in this study was composed of 397 relief applicants of the Cambridge branch of the Emergency Relief Administration.

The standard of living in Bristol [England]: A preliminary report of work of University of Bristol social survey. By Herbert Tout. Bristol, [University of Bristol?], 1938. 64 pp.

Sets a minimum standard of living and measures conditions of Bristol families on this basis.

Levels of living in the Ilocos region [Philippine Islands]. By Horacio C. Lava. Prepared for Philippine Council, Institute of Pacific Relations. Manila, University of the Philippines, College of Business Administration, 1938. 94 pp. (International Research Series, Study No. 1.)

The data gathered in this study, made in 1935 and covering 93 families, showed the rural worker to be living at a very low level. Expenditures for food, which amounted to 62 percent of the total expenditures for a family of 5 persons, provided only half the caloric content estimated as adequate. Other consumption was on a correspondingly low scale.

Rents for the working classes. Frankfort a. M., International Housing Association, [1938?]. 286 pp. (Proceedings, International Housing and Town Planning Congress, Paris, 1937.)

Rent-restriction laws are explained, and methods of establishing rental rates are outlined, for various countries.

Economic and Social Problems

The causes of economic fluctuations—possibilities of anticipation and control. By Willford I. King. New York, Ronald Press Co., 1938. 353 pp., charts.

The author not only outlines his views of the causes of economic fluctuations but also devotes considerable space to their control. In relation to labor, he advocates "flexible" wages in private employment and holds that the government in providing emergency relief work should require able-bodied persons to work not less than 60 hours per week and should pay not more than 60 percent of the hourly rate customarily paid by private employers for similar work.

Des crises générales et périodiques de surproduction. By Jean Lescure. Paris, F. Loviton & Cie, 1938. 702 pp.; 2 vols. 5th ed.

A study of general and periodic crises of overproduction. The first volume gives the history of the crises as they have occurred in the different countries since 1810; the second volume deals with causes and remedies.

Debts and recovery: A study of changes in the internal debt structure from 1929 to 1937 and a program for the future. By Twentieth Century Fund, Committee on Debt Adjustment. New York, Twentieth Century Fund, 1938. xxvi, 366 pp., charts.

The section on factual findings, prepared by Albert Gailord Hart, includes discussions of building and loan associations, insurance companies, and Government agencies. Among the recommendations made by the Committee on Debt Adjustment are changes in State laws for encouraging the buying of equities, as against the purchase of such securities as bonds and mortgages, and the gradual elimination of tax-exempt securities.

Practical problems in economics. By Broadus Mitchell and Louise Pearson Mitchell. New York, Henry Holt & Co., 1938. 596 pp., charts.

Among the topics of special interest to labor are cooperation, housing, unemployment, the forms of labor organization, and the relations of employers and workers. The concluding chapters contrast Russian methods of handling economic problems with the methods used by the German and Italian Governments. A brief bibliography is given at the end of each chapter.

Speaking of change: A selection of speeches and articles by Edward A. Filene. New York, [Edward A. Filene Good Will Fund, Inc.?], 1939. 322 pp.

The varied subjects discussed in these speeches and articles include cooperation, education, the Constitution and the Supreme Court in relation to economic change, and the economic basis of higher wages.

Fascist economic policy: An analysis of Italy's economic experiment. By William G. Welk. Cambridge, Harvard University Press, 1938. xx, 365 pp. (Harvard Economic Studies, Volume LXII.)

Analyzes the background and fundamental principles of Fascism and Fascist economic philosophy and their influence on syndical organization, collective labor agreements, labor courts, population, industry, commerce, finance, standard of living, etc. Summaries and excerpts of labor and other laws of the corporate state are given, and also statistics on such matters as collective labor agreements, strikes and lock-outs, membership of syndical organizations, wages, and social insurance, in different years down to 1937.

Employment and Unemployment

Annual review of employment situation in Canada during 1938. Ottawa, Dominion Bureau of Statistics, 1939. 47 pp., charts; mimeographed.

Estimates of employment and unemployment from this report are published in this issue of the Monthly Labor Review.

Employment Service

Public employment service in the United States. By Raymond C. Atkinson, Louise C. Odencrantz, and Ben Deming. Chicago, Public Administration Service (for Committee on Public Administration of Social Science Research Council), 1938. 482 pp.

Covers organization and administration, employment service procedure, and special types of employment service.

Le placement public des travailleurs en Belgique: Le fonctionnement des institutions existantes et les réformes nécessaires. By Victor Martin. Bruxelles, Imprimerie A. Hessens, 1938. 312 pp., map, charts, bibliography. (Université de Louvain, collection de l'École des Sciences Commerciales et Économiques.)

The author describes public employment office methods in Belgium and discusses the abuses connected with private employment exchanges. Consideration is also given to legislation regulating employment offices in certain other countries.

Family Allowances

Les allocations familiales dans le commerce et l'industrie en droit français et étranger. By Marie-Magdeleine Laporte. Paris, Librairie Dalloz, 1938. 302 pp.

Reviews the legislation on family allowances in France and certain other countries.

Assegni e salari familiari. By H. E. Schuchardt. (In *Le Assicurazioni Sociali*, Istituto Nazionale Fascista della Previdenza Sociale, Rome, September-October 1938, pp. 743-757.)

A survey of family allowances in various countries, followed by a brief reading list.

Family allowances. By Marjorie E. Green. London, Family Endowment Society, 1938. 32 pp.

The writer discusses family-allowance schemes in operation in several countries and presents arguments in favor of such allowances.

Health and Industrial Hygiene

Message from the President of the United States transmitting the annual message on health security. Washington, U. S. House of Representatives, 1939. 74 pp. (Document No. 120, 76th Cong., 1st sess.)

Letter from the President to the Congress outlining the need for a comprehensive system of medical care for the country, and presenting the report and recommendations for a national health program by the Interdepartmental Committee to Coordinate Health and Welfare Activities.

Minimum standards for health of workers in brick-manufacturing industry. Chicago, Illinois Department of Public Health, [1938?]. 14 pp. (Educational Health Circular, Industrial Health Series No. 3.)

Survey of carbon disulphide and hydrogen sulphide hazards in viscose rayon industry. Harrisburg, Department of Labor and Industry, Occupational Disease Prevention Division, 1938. 69 pp., charts, bibliography. (Bulletin No. 46.)

Two series of medical examinations of 120 viscose-rayon employees were made in connection with the survey, and the report contains discussions, by different experts, of the symptoms produced by exposure to the fumes of these two poisonous gases.

Report of commission appointed to inquire into the possible prevalence and origin of cases of silicosis and other industrial pneumoconioses in industries of Colony of Southern Rhodesia, and of pulmonary tuberculosis in such industries. Salisbury, Southern Rhodesia, 1938. 96 pp., charts, illus.

The study showed that while silicosis does exist in Southern Rhodesia the situation is not serious and working conditions in the mines have been much improved.

Housing

Urban housing: A summary of real property inventories conducted as work projects, 1934-1936. By Peyton Stapp. Washington, U. S. Works Progress Administration, Division of Social Research, 1938. xii, 326 pp., map.

Reviewed in this issue.

Report of Alley Dwelling Authority for District of Columbia for fiscal year July 1, 1937, to June 30, 1938. Washington, 1938. 17 pp.; mimeographed

Recapitulation of projects undertaken, showing number of dwelling units, area of sites, costs, and values.

Home financing in relation to business fluctuations: A study of Illinois and Wisconsin. Chicago, Federal Home Loan Bank of Chicago, [1938?]. 19 pp., charts; mimeographed.

Shows incomes, building permits, construction costs, and related statistics that affect home financing.

Financing house-building of the lower classes. Frankfort a. M., International Housing Association, [1938?]. 91 pp. (Proceedings, International Housing and Town Planning Congress, Paris, 1937.)

Deals with methods of financing public and private housing in a number of countries.

Final report of International Housing and Town Planning Congress, Paris, 1937. Brussels, International Federation for Housing and Town Planning, [1938?]. Various paging; mimeographed.

Collection of reports delivered, and an alphabetical list of delegates.

Housing in tropical and subtropical countries. Brussels, International Federation for Housing and Town Planning, 1938. Various paging, plans, illus. (Proceedings, International Housing and Town Planning Congress, Mexico City, 1938.)

Includes diagrams of floor plans used in different parts of the world, and shows how houses are built to get the greatest benefit from prevailing winds.

Income

Income in the United States, 1929-37. By Robert R. Nathan. Washington, U. S. Bureau of Foreign and Domestic Commerce, 1938. 42 pp., charts.

Data from this report are published in this issue of the Monthly Labor Review.

Industrial Accidents and Workmen's Compensation

Accident facts, 1938 edition. Chicago, National Safety Council, Inc., 1938. 96 pp., charts.

Statistical and graphic presentation of accident experience in the United States in 1937 and earlier years. The National Safety Council estimates that in 1937 work accidents resulted in death for 19,500 persons, in permanent disability for 75,000, and in temporary disability for 1,550,000. The accident frequency rate for 1937, based on individual company reports to the National Safety Council, was 38.7 per 1,000,000 man-hours worked, the same as for 1936, while the severity rate was 58.4 per 1,000 man-hours worked as compared with 59.5 in 1936; in 1929 the frequency rate was 74.1 and the severity rate, 84.2.

Accidental deaths in Tennessee, 1937. Nashville, Tennessee Department of Public Health, [1938]. 11 pp., charts.

Of the 1,989 deaths from accidents during 1937 in Tennessee, 158, or 7.9 percent, were occupational, and 636, or 32 percent, were due to accidents in the home.

Annual summary of injuries in petroleum industry, 1937. New York, American Petroleum Institute, Department of Accident Prevention, 1938. 16 pp., chart.

The report states that 1 out of 2,708 petroleum workers was fatally injured or totally disabled in 1937 as compared with 1 out of 1,292 in 1928. The accident frequency rate declined from 27.33 per 1,000,000 man-hours worked in 1928 to 14.60 in 1937; and the severity rate, from 2.69 per 1,000 man-hours worked in 1928 to 1.67 in 1937.

Nineteenth annual report of North Dakota Workmen's Compensation Bureau, for fiscal year ending June 30, 1938. Bismarck, [1938]. 21 pp.

Annual report of Industrial Commission of Puerto Rico, for fiscal year 1937-38. San Juan, 1938. 61 pp.

Third annual report of Industrial Commission of Puerto Rico under the present Workmen's Accident Compensation Act, which went into effect on July 1, 1935.

Twenty-fifth annual report of State compensation commissioner, West Virginia, on workmen's compensation fund, for year ending June 30, 1938. Charleston, 1938. 136 pp.

Report of Royal Commission on Safety in Coal Mines [Great Britain]. London, 1938. 2 vols.

The report covers legislation on safety in coal mines; accident rates in coal mines in Great Britain and other countries; organization and management of the industry; safety organization and training; health, including first aid and the prevention of occupational diseases; and contains the recommendations of the committee.

Safety education in schools of mining districts. By F. S. Crawford, A. U. Miller, and C. W. Owings. Washington, U. S. Bureau of Mines, 1938. 34 pp. (Miners' Circular 37.)

Industrial Psychology

Employability influenced by personality. By Robert N. McMurry. (In *Employment Service News*, U. S. Employment Service, Washington, November 1938, pp. 9-12.)

In this article the executive secretary of The Psychological Corporation, Chicago, Ill., discusses psychological unemployability—a condition which he feels should be judged and handled only by psychologists or psychiatrists, based on a thorough study of the individual. It has been found that many of the so-called unemployables have certain personality traits in common, chief among which are tendencies toward dependence, irresponsibility, incapacity for self-discipline, and very little regard for the consequences of their actions, traits which the writer points out are also characteristic of the young child. He states that in the majority of cases these individuals possess excellent ability, and that under an effective guidance program at least a part of this ability may be utilized productively.

Industrial Relations

Third annual report of National Labor Relations Board, for fiscal year ended June 30, 1938. Washington, 1939. 292 pp., charts.

The greater part of the report is devoted to an exposition of the principles established by the Board.

List of references on National Labor Relations Board. Compiled by Bernard W. Stern. Washington, U. S. National Labor Relations Board, Division of Economic Research, 1938. 18 pp.; mimeographed.

Two bibliographies are presented in this list, one covering the period from the first National Labor Board in 1933 to October 1937, and the second, the period from October 1937 to October 1938.

Violations of free speech and rights of labor. Hearings, July 18, 1938, before a subcommittee of Committee on Education and Labor, United States Senate, 75th Cong., 3d sess., pursuant to S. Res. 266 (74th Cong.). Part 23 (pp. 9729-9984). Washington, 1939.

Described by the committee as the first of 12 volumes (pts. 23-34) of hearings and exhibits dealing with labor relations in the steel industry, the 1937 "Little Steel" strike, and the groups involved in this strike, directly and indirectly. Previous hearings relating to the 1937 "Little Steel" strike appeared in part 19.

Les conventions collectives de travail. By Renée Petit. Paris, Librairie Dalloz, 1938. 205 pp.

Historical and critical account of the laws and jurisprudence relating to collective agreements in France, with an analysis of the law of June 24, 1936. The last section of the book contains statistics of agreements concluded in the past 2 years and suggested amendments to the law.

Labor and Social Legislation

Industry's adjustment to recent labor legislation. By William M. Leiserson. (In *Society for the Advancement of Management Journal*, New York, January 1939, pp. 5-10.)

Laws requiring payment of wages at specified times. Washington, U. S. Bureau of Labor Statistics, 1939. 12 pp. (Serial No. R. 855, reprint from December 1938 *Monthly Labor Review*.)

Die nationalsozialistische arbeitseinsatz-gesetzgebung. By W. Sommer. Berlin, Otto Elsner Verlagsgesellschaft, [1938]. 348 pp.

Contains laws, orders, and regulations regarding employment, employment service, unemployment insurance, and unemployment relief in Germany under the National Socialist Government.

Factory law [Great Britain]. By Clara D. Rackham. London, Thos. Nelson & Sons, Ltd., 1938. 160 pp.

Detailed description of the Factories Act, 1937, and other laws affecting factory workers in Great Britain.

Labor Organization and Conventions

Report of proceedings of fifty-eighth annual convention of American Federation of Labor, held at Houston, Tex., October 3-13, 1938. Washington, American Federation of Labor, [1938]. xxx, 594 pp.

A brief account of the proceedings of the convention, and data on membership of unions affiliated with the American Federation of Labor, were given in the November 1938 Monthly Labor Review (pp. 1034-1038).

Proceedings of first constitutional convention of Congress of Industrial Organizations, held in Pittsburgh, Pa., November 14-18, 1938. [Washington, Congress of Industrial Organizations, 1938.] 302 pp.

The convention proceedings and the structure of the Congress of Industrial Organizations (C. I. O.), formerly called Committee for Industrial Organization, were briefly outlined in an article in the December 1938 Monthly Labor Review (pp. 1326-1330).

The International Brotherhood of Teamsters. By Daniel J. Tobin. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, January 1939, pp. 6-9.)

The position of the International Ladies' Garment Workers' Union in relation to CIO and AFL, 1934-1938, chronicled in documents and records. New York, International Ladies' Garment Workers' Union, 1938. 81 pp.

Twenty-seventh annual report on labor organization in Canada (for calendar year 1937). Ottawa, Department of Labor, 1938. 261 pp.

Minimum Wage

Interim report of Administrator of Wage and Hour Division, U. S. Department of Labor, for period August 15 to December 31, 1938. Washington, 1939. Various paging, maps, charts; mimeographed.

Covers the early months of operation under the Fair Labor Standards Act of 1938. Reviewed in part in this issue.

Factors to be considered in preparing minimum-wage budgets for women. Washington, U. S. Department of Agriculture, 1938. 45 pp. (Miscellaneous Publication No. 324.)

Printed and revised edition of a report, first issued in mimeographed form, prepared by the Bureau of Home Economics, U. S. Department of Agriculture, in cooperation with the Women's Bureau, U. S. Department of Labor. The pamphlet also contains a discussion by the chief of the retail price division, U. S. Bureau of Labor Statistics, of the problems connected with the retail pricing of a minimum-wage budget, and suggestions as to desirable procedure in price collection.

Old-Age Pensions

Analysis of grants to 586,000 recipients of old-age assistance. (In Social Security Bulletin, U. S. Social Security Board, Washington, November 1938, pp. 12-19; charts.)

Reviewed in this issue.

The effect of the Social Security Act on private pension plans. Princeton, Princeton University, Industrial Relations Section, 1939. 16 pp., bibliography; mimeographed.

Results of a survey of 46 industrial pension plans which have been changed or established since the passage of the Federal Social Security Act for the purpose of bringing them into uniformity with the Federal program.

Report of Delaware Old Age Welfare Commission for year 1938. Dover, 1939. 6 pp.

The commission reports a pension list of 2,600 at the end of 1938, with a waiting list of 1,064. The average monthly pension was \$10.81 for 1938.

Older Worker in Industry

Workers over 40. New York, National Association of Manufacturers, 1938. 64 pp.

The study was made among the members of the association to determine whether or not industry retains workers after they reach the age of 40 or discriminates against such workers in hiring, firing, and layoffs. The study was also designed to throw light on such related questions as the comparative work performance of older and younger workers, accident and health rates, and the attitude of employers generally toward older workers.

Prices and Price Control

State differentials in prices paid by farmers for family living. By Florence A. Armstrong. (In Social Security Bulletin, U. S. Social Security Board, Washington, November 1938, pp. 9-11; map.)

Index number of agricultural prices [in England and Wales], 1938. London, Ministry of Agriculture and Fisheries, 1938. 42 pp., charts.

Account of methods used in computing the newly introduced index numbers of agricultural prices.

Government price-fixing. By Jules Backman. New York, Pitman Publishing Corporation, 1938. 304 pp.; bibliography.

The author criticizes and opposes government efforts to regulate prices. He advocates a competitive price system, and therefore, by inference, opposes non-governmental as well as governmental price-fixing, although methods of maintaining free competition are not discussed.

Price control in Fascist Italy. By Henry Siefke Miller. New York, Columbia University Press, 1938. 146 pp., charts; bibliography.

Price controls as developed since 1935 are viewed as an integral part of the national economy, and as designed to promote economic self-sufficiency. There is some information on prices as compared with wages. Data from this study were published in *Political Science Quarterly* for December 1938 (pp. 584-598.).

Productivity of Labor and Technological Changes

Productivity and employment in selected industries: Beet sugar. By Raymond K. Adamson and Miriam E. West. Washington, U. S. Works Progress Administration, 1938. xxiv, 190 pp., charts. (National Research Project, Studies of Productivity and Employment in Selected Industries, Report No. N-1.) Reviewed in this issue.

Technology, employment, and output per man in phosphate-rock mining, 1880-1937. By A. Porter Haskell, Jr., and O. E. Kiessling. Washington, U. S. Works Progress Administration, 1938. xvi, 130 pp., map, charts, illus. (National Research Project, Mineral Technology and Output Per Man Studies, Report No. E-7.)

Phosphate-rock mining employed about 7,000 men in 1920 and in recent years around 3,000. Output per man-hour increased about nineteenfold since 1880 and about 71 percent between 1927 and 1937. The main factor affecting labor productivity has been technological change. Much of the machinery and many of the methods introduced have tended to save capital as well as labor. The study deals not only with these changes but also with changes in wages, hours, types of skill, and working conditions.

Labor productivity in retailing. By David R. Craig. (In proceedings of Boston Conference on Distribution, Boston Chamber of Commerce, Retail Trade Board, 1938, pp. 22-25.)

Social Security (General)

Final report of Advisory Council on Social Security, December 10, 1938. Washington, 1938. 54 pp.

Report of council appointed by the Senate Special Committee on Social Security and the Social Security Board, in May 1937, for the purpose of studying the advisability of amendments to certain sections of the national Social Security Act. Of the council members, 6 represented organized workers, 6 represented employers, and 13 represented the public. The report makes a number of recommendations as regards benefits, coverage, and finance, which are explained in detail.

Third annual report of Social Security Board, fiscal year ended June 30, 1938, with supplementary data, July 1–October 31, 1938. Washington, 1938. 251 pp., charts, folders.

Summary data from this report are given in this issue of the Monthly Labor Review.

Social security in the United States: An analysis and appraisal of the Federal Social Security Act. By Paul H. Douglas. New York, McGraw-Hill Book Co., 1939. 493 pp. 2d. ed., revised.

Social insurance coordination: An analysis of German and British organization. By C. A. Kulp. Washington, Social Science Research Council, Committee on Social Security, 1938. xiv, 333 pp.

The study is concerned with the inter-relation of social insurance and relief in Germany and Great Britain, and is essentially a discussion of organizational policy. Two major organizational trends—toward centralization and toward coordination—form the main themes.

L'attività dell'Istituto Nazionale Fascista della Previdenza Sociale nel 1937. Rome, Istituto Nazionale Fascista della Previdenza Sociale, 1938. 49 pp. (Appendix to *Le Assicurazioni Sociali*, September–October 1938.)

Report through 1937 of the Italian National Fascist Institute of Social Welfare, covering invalidity and old age pensions, insurance against unemployment and tuberculosis, maternity aid, and family allowances.

Le assicurazioni sociali nell'America del Sud. By Gisela Augustin. (In *Le Assicurazioni Sociali*, Istituto Nazionale Fascista della Previdenza Sociale, Rome, September–October 1938, pp. 763–783.)

Summarizes the principal provisions of certain social-insurance schemes in Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Peru, Uruguay, and Venezuela.

Statistics (General)

Fourth annual report of Central Statistical Board, July 1, 1937, to June 30, 1938. Washington, 1938. 21 pp.

Introduction to economic statistics. By W. L. Crum, A. C. Patton, and A. R. Tebbutt. New York, McGraw-Hill Book Co., Inc., 1938. 423 pp., charts.

Opportunities for statistical workers. By Donald E. V. Henderson. Chicago, Science Research Associates, 1938. 56 pp., illus. (Occupational Monograph No. 1.)

Most of the pamphlet is devoted to a simplified account of statistical methods and the uses of statistics in everyday life, business, government, and research. The concluding chapter is entitled "Getting a job in statistics."

Tennessee Valley Authority

Annual report of Tennessee Valley Authority, for fiscal year ended June 30, 1938. Washington, 1938. 2 vols.

Data on working conditions and cooperatives, taken from the report, are given in this issue of the Monthly Labor Review.

Vacations With Pay

Holidays with pay in food and drink industries, 1937–38. Zurich, International Union of Food and Drink Workers, 1938. 45 pp.; mimeographed.

Reviews legislation regarding holidays with pay in different countries, with special reference to workers in the food and drink trades.

Report of conference on workers' holidays, London, November 30, 1938. London, Industrial Welfare Society, Inc., 1938. 24 pp.

Includes addresses delivered at the conference, some of which dealt with holidays in specific industries.

Wages and Hours of Labor

Wages, working and other conditions in glass industry of several countries; report on international trade group conference for glass industry, held in Amsterdam on June 23, 1938. Amsterdam, International Federation of General Factory Workers, 1938. 58 pp.; mimeographed.

Study of incomes, salaries, and employment conditions affecting nurses (exclusive of those engaged in public health nursing). New York, American Nurses' Association, 1938. 528 pp.

Includes State summaries from information for 1934 and 1935 submitted by private duty, institutional, and office nurses; national findings as disclosed in these summaries; and specific and general recommendations based on the national findings.

Union scales of wages and hours in printing trades, June 1, 1938. Washington, U. S. Bureau of Labor Statistics, 1939. 20 pp. (Serial No. R. 859, reprint from December 1938 Monthly Labor Review.)

Railroad wages and months of service, 1937. Washington, U. S. Railroad Retirement Board, 1938. 3 vols.

These tabulations, made under the provisions of the Railroad Retirement Act, are described as being based on a summarization of earnings for each individual employee and are therefore not comparable with wage data based on monthly totals of wages paid and of the number of persons employed. The tabulations are significant particularly in showing the extremely wide range both of earnings and of time worked, for all workers combined, for occupational groups, and for regions. The three volumes provide adequate and detailed statistics relating to annual earnings for the year 1937. Volumes 1 and 2 deal with class I railroads; volume 1 gives data for 76 occupations for the country as a whole, and volume 2, regional tables for the 76 selected occupations. Volume 3 covers switching and terminal companies, express companies, class II and III railroads, Pullman Co., electric railroads, and car loan companies.

A statistical analysis of carriers' monthly hours of service reports covering all railroads which reported during the year ended June 30, 1938, instances in which employees were on duty for periods other than those provided by Federal Hours of Service Act, together with comparative summary covering years ended June 30, 1934, to 1938. Washington, U. S. Interstate Commerce Commission, Bureau of Safety, 1938. 23 pp.

Annual earnings in navy yards and private shipyards. Washington, U. S. Bureau of Labor Statistics, 1939. 16 pp. (Serial No. R. 861, reprint from December 1938 Monthly Labor Review.)

Wages and hours in street and sewer construction. By Edward P. Sanford. Washington, U. S. Bureau of Labor Statistics, 1939. 13 pp. (Serial No. R. 860, reprint from December 1938 Monthly Labor Review.)

Labor, wages, and cost of living in Colony of Bahamas, 1937. [Nassau, 1938?] 3 pp.

An official report of the Colony of Bahamas showing wages and hours of labor for different occupations in government and private employment.

Annual report on social and economic progress of the people of Hong Kong, 1937. London, [Colonial Office], 1938. 55 pp., map. (Colonial Reports—Annual, No. 1867.)

Data are given on average rates of wages of workers in the building trades, shipbuilding, engineering, and transportation; of female workers in factories; and of domestic servants.

Wages policy and business cycles. By E. Ronald Walker. (In International Labor Review, Geneva, December 1938, pp. 758-793.)

The first article in a series on wage policy and the business cycle which the International Labor Office is publishing in the International Labor Review. The author discusses the effects of wage policy on industrial fluctuations and gives his conclusions as to the types of wage policy he considers appropriate at different stages of the business cycle.

Industrial fluctuations and wage policy—some unsettled points. By Emil Lederer. (In *International Labor Review*, Geneva, January 1939, pp. 1-33.)

This second article in the series on wage policy and the business cycle, begun in the December 1938 *International Labor Review*, deals with the implications of business-cycle theory for wage policies.

General Reports

Twenty-sixth annual report of Secretary of Labor, for fiscal year ended June 30, 1938. Washington, U. S. Department of Labor, 1938. 163 pp.

In addition to the report on the work of the Secretary's Office, detailed reports are given on the work of the Bureau of Labor Statistics, Children's Bureau, Conciliation Service, Division of Labor Standards, Division of Public Contracts, Employment Service, Immigration and Naturalization Service, and Women's Bureau, and on the duties of the Department of Labor in connection with the Civilian Conservation Corps program.

Annual report of Massachusetts Department of Labor and Industries, for year ending November 30, 1937. Boston, 1938. 220 pp., charts.

Reports of activities of the various divisions of the department, with statistics on the subjects dealt with, including industrial accidents, occupational diseases, minimum wage, cost of living, employment, unemployment compensation, and work of employment offices. Brief summaries are given of the results of the department's special surveys of chemical substances dangerous to health used in manufacture of woolen and worsted goods, dry cleaning, fabric and paper coating, can manufacturing, and automobile spray coating.

Eighteenth biennial report of Bureau of Labor and State Welfare Commission, Oregon, from July 1, 1936, to June 30, 1938. Salem, 1938. 124 pp.

Contains tabulations showing employment, wage rates, and hours of labor (for union labor) in Oregon, by industry. The extent of the 5-day week and Saturday half-holiday for union labor is also shown. A directory of manufacturing plants in the State is appended.

Annual report of Commissioner of Labor of Puerto Rico, 1937-38. San Juan, Department of Labor, 1938. 159 pp.

Data on average earnings and hours in various industries, from this publication, are given in this issue of the *Monthly Labor Review*. The report also contains information on collective agreements, workmen's compensation, employment-office activities, homesteading, women and children in industry, and labor legislation.

Annual report of Governor of Virgin Islands, for fiscal year ending June 30, 1938. Washington, U. S. Department of the Interior, 1938. 21 pp.

Accomplishments of the work-relief program, homesteads, low-cost housing, and the Virgin Islands Cooperative, are among the subjects covered.

Annuaire statistique de la Grèce, 1937. Athens, Ministère de l'Économie Nationale, Statistique Générale, 1938. 592 pp. (In Greek and French.)

Topics of labor interest for which figures are given, mainly through 1936, include number of persons employed in industrial enterprises, collective labor contracts, accidents to mine workers, social insurance, prices, and cooperative societies.

Statistisches Jahrbuch für das Deutsche Reich, 1938. Berlin, Statistisches Reichsamtsamt, 1938. Various paging.

Contains statistical information regarding social and economic conditions in Germany in 1938, including wages, prices, cost of living, employment, unemployment, social insurance, public health, welfare work, housing, etc.

Labor conditions in Indo-China. Geneva, International Labor Office (American branch, 734 Jackson Place NW., Washington), 1938. 331 pp. (Studies and Reports, Series B, No. 26.)

The report discusses racial groups, population problems, and economic development and conditions. It is divided into four parts, covering forced or compulsory labor, wage-paid employment, independent workers such as handicraftsmen and peasants, and special categories of workers including Asiatics and Europeans. In the concluding section the possibility of improving social conditions through legislation and through cooperative institutions is discussed.

Statistical abstract [of Ireland], 1938. Dublin, Department of Industry and Commerce, 1938. 220 pp.

Contains statistics of wages of male agricultural laborers and female farm servants, industrial accidents, workmen's accident compensation, industrial disputes, housing, and social insurance.

Jaarverslag der inspectie van den havenarbeid over 1937. The Hague, Departement van Sociale Zaken, 1938. 72 pp.

Annual report on labor inspection in the harbors of the Netherlands in 1937, including information on protective legislation, working hours, overtime and Sunday work, accidents, hazards in various kinds of work, and safety measures.

Årsberetninger fra arbeidsrådet og arbeidstilsynet, 1937. Oslo, Chefinspektøren for Arbeidstilsynet, 1938. 112 pp., charts, illus.

Annual report on factory inspection in Norway, including information on protective labor legislation, activities of works councils, accidents, and safety measures. Printed in Norwegian with résumé in French and French translations of table of contents and some table heads.

The Soviet comes of age. London, William Hodge & Co., Ltd., 1938. 337 pp., illus. (In English.)

A series of separate studies, by prominent Russian scientists and administrators, on various phases of social and economic life in the Soviet Union, covering industries, agriculture, trades, education, labor, social insurance, etc.